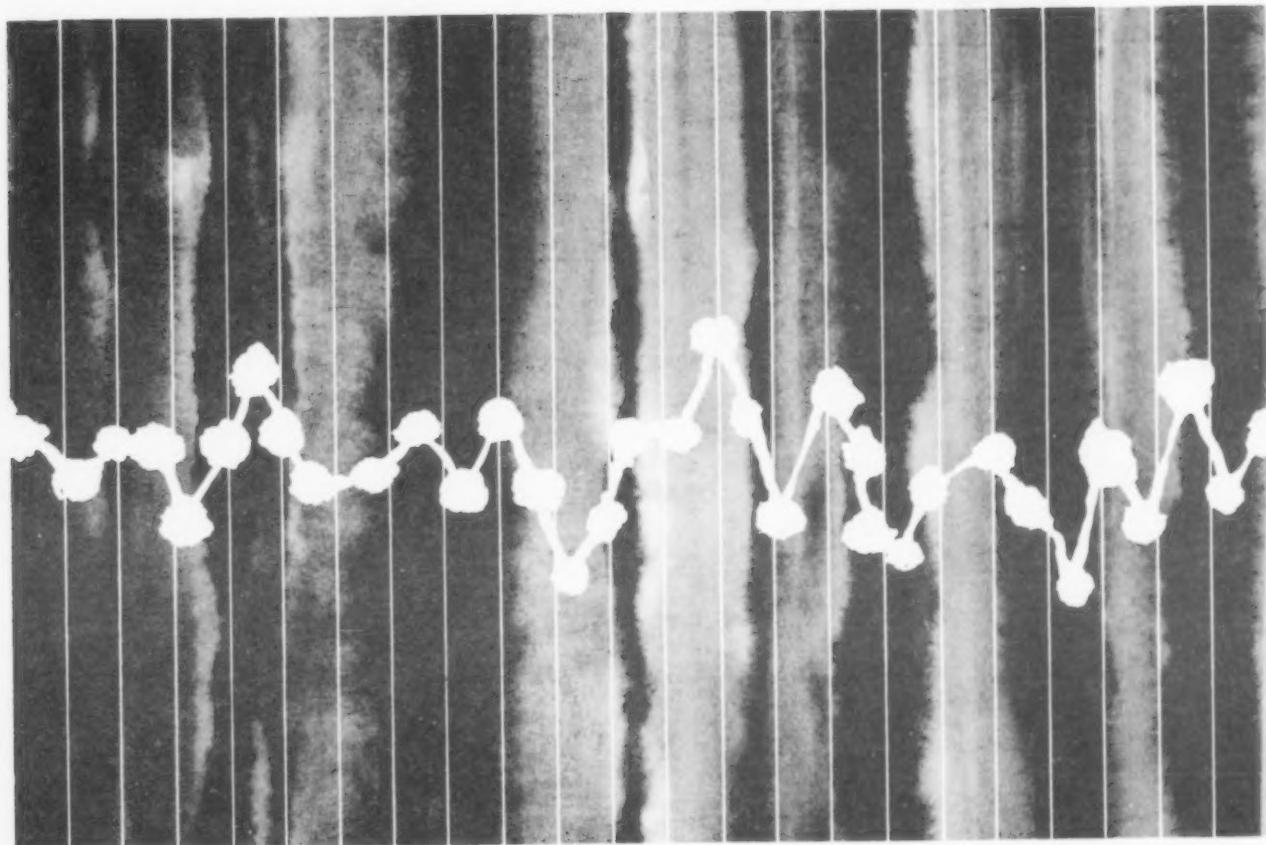


defense indicators

JUNE 1978



U.S. DEPARTMENT OF COMMERCE • BUREAU OF ECONOMIC ANALYSIS



U.S. DEPARTMENT OF COMMERCE

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defense indicators

June 1978

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DISCONTINUATION OF *DEFENSE INDICATORS*

Publication of ***DEFENSE INDICATORS*** will cease with the June 1978 issue as a result of a review under the President's Zero Base Budgeting procedure.

Statistical coverage of defense-related activities will be expanded in ***BUSINESS CONDITIONS DIGEST***. The Superintendent of Documents will substitute ***BUSINESS CONDITIONS DIGEST*** for the unused portion of the ***DEFENSE INDICATORS*** subscription on a prorated basis. Those who already subscribe to ***BCD*** will have their subscriptions to ***BCD*** extended proportionately.

Annual subscription price of ***BUSINESS CONDITIONS DIGEST*** is \$40 domestic, \$50 foreign. Single copy price: \$3.50 domestic, \$4.50 foreign. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Introduction

The purpose of this monthly report is to bring together the principal time series on defense activity which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. Most are monthly but a few quarterly series are included. The series numbers used are for identification purposes only and do not reflect relationships or order.

Classification of Series

Chart 1 compares Government purchases of goods and services for national defense with total gross national product. GNP is the market value of the final output of goods and services produced by the Nation's economy and represents a very broad measure of aggregate economic activity. In addition to national defense purchases, it includes Federal Government purchases of goods and services for nondefense purposes, State and local government purchases, personal consumption expenditures, gross private domestic investment, and net exports of goods and services. Chart 1 also presents national defense purchases as a percent of gross national product and, for both series, changes from the previous quarter.

A related group of series is shown in Chart 4, "Defense Related Balance of Payments Components." These series show the effects of defense-related economic activity on the balance of payments accounts.

The remaining series are grouped in accordance with the time at which the activities they measure occur within the defense order-production-delivery process. Those series measuring activities that usually precede production, such as new orders placed with defense products industries and contract awards, are presented in Chart 2, "Advance Indicators of Defense Activity." Chart 3, "Intermediate and Final Indicators of Defense Activity," presents series that measure activities which tend to move at the same time as production (such as employment) and activities which usually follow production (such as shipments).

Series Included

Following is a list of the series as they appear in charts 1, 2, 3, and 4 (the source agencies are abbreviated in parentheses; detailed lists of sources for charts 1, 2, and 3 appeared as appendixes to the August and October 1968 issues of this report).

Gross National Product and National Defense Purchases

- Gross national product (BEA)
- Federal Government purchases of goods and services, national defense (BEA)
- National defense purchases as a percent of gross national product (BEA)
- Gross national product, changes from previous quarter (BEA)
- National defense purchases, changes from previous quarter (BEA)

Advance Indicators of Defense Activity

- Defense Department gross obligations incurred, total (DOD)
- Defense Department gross obligations incurred, procurement (DOD)
- Gross obligations incurred outside the Government for national defense (Treasury)

Defense Department military prime contract awards for work performed in the United States (DOD)

Defense Department gross unpaid obligations outstanding (DOD)

Manufacturers' new orders (Census):

- Defense products industries

- Defense products

Manufacturers' new orders from the U.S. Government, aerospace industries (Census):

- Average weekly overtime hours, production workers, defense products industries (BLS)

Accession rate, defense products industries (BLS)

Layoff rate, defense products industries (BLS)

Intermediate and Final Indicators of Defense Activity

Output of defense and space equipment (FRB)

Manufacturers' inventories (Census):

- Defense products industries

- Defense products

Manufacturers' unfilled orders (Census):

- Defense products industries

- Defense products

Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census)

Defense Department progress payments outstanding (DOD)

Employment in defense products industries, total (BLS)

Employment in defense products industries, production workers (BLS)

Index of aggregate weekly hours, defense products industries (BLS)

Index of aggregate weekly payrolls, production workers, defense products industries (BLS)

Defense Department personnel, military, active duty (DOD)

Defense Department personnel, civilian, direct hire employment (DOD)

Defense Department net outlays, total, military functions and military assistance (DOD)

Defense Department net outlays, procurement (DOD)

Budget outlays for the national defense function (Treasury)

Defense Department personnel compensation (DOD)

Manufacturers' shipments (Census):

- Defense products industries

- Defense products

Manufacturers' shipments to the U.S. Government, aerospace industries (Census)

Ratio, manufacturers' unfilled orders to shipments (Census):

- Defense products industries

- Defense products

Ratio, manufacturers' inventories to shipments (Census):

- Defense products industries

- Defense products

Defense-Related Balance of Payments Components

Transfers under U.S. military agency sales contracts—exports (BEA)

Direct defense expenditures—imports (BEA)

U.S. Government cash receipts associated with military sales contracts (BEA)

Some additional data are included in the tables though not presented in the charts. These include Defense Department military prime contract awards by procurement category (e.g., for aircraft, missiles and space systems, ships, weapons, and ammunitions), the operations component of Defense Department

gross obligations incurred, gross unpaid obligations outstanding, and net outlays and the procurement component of gross unpaid obligations outstanding.

Description of Basic Data

The Department of Defense compiles statistics on obligations, contract awards, personnel compensation, and outlays. The DOD obligations and outlays data are based on the Defense Department's monthly *Status of Funds* report which is developed from accounting data and is designed to provide information on the total status of Defense Department financing. Accounts included in this report are aggregated by appropriation categories including personnel costs, operations and maintenance, procurement, research and development, and construction. The *Status of Funds* report duplicates some obligations. That is, obligations of one government unit to another unit are not netted out.

The Defense Department's *Contract Awards* report covers the awarding of procurement contracts. These include obligations for operating and maintenance supplies, equipment and services, research and development, and construction in addition to the obligations for items that constitute the fiscal "procurement" category. The statistics are aggregated by commodity categories including aircraft, missile and space systems, ships, weapons, ammunition, electronics and communication equipment, fuels, and textiles and clothing. The *Contract Awards* report includes procurement for NASA, other nondefense agencies, and the Foreign Military Sales Program which are not included in the *Status of Funds* report.

The Census quarterly new orders, unfilled orders and shipments series for "aerospace industries" are based on reports of companies classified into the following industry categories:

Industry	SIC Code
Aircraft and parts	372
Guided missiles and space vehicles, completely assembled ..	1925

The Census and BLS data for "defense products industries" presented in this report cover companies and establishments¹ classified into the following industry categories in accordance with the *Standard Industrial Classification Manual*, 1967 edition, Executive Office of the President, Bureau of the Budget:

Industry	SIC Code
Ordnance and accessories	19
Communication equipment	366
Aircraft and parts	372

Establishments reporting to the BLS are classified into industries on the basis of their principal product or activity as determined from information on annual sales volume, which is collected each year on a supplement to the monthly report. The entire employment of an establishment making more than one product or engaging in more than one activity is included under the industry accounting for the largest percentage of the annual sales of that establishment.

The Census Bureau's monthly survey is based primarily on reports at the company level and the monthly estimates are benchmarked to the establishment data from the *Annual Survey*

¹An establishment is a single physical location where business is conducted (e.g., a plant). A company often includes more than one establishment.

of Manufactures. Also, many of the large diversified companies file separate divisional reports monthly. Although the reports in the survey are also classified according to their principal product or activity, this difference in the organizational level from which reports are received results in firms being classified into different industries in the BLS and Census surveys and, consequently, limits somewhat the comparability of the data collected by these agencies. However, as we know from past studies in this area, some differences in industrial classification between BLS and Census data would remain even if reports came from the same organizational levels.

Both the Census and the BLS data include a significant amount of nondefense activities carried on by companies and establishments classified in the above industries. For example, the data cover the production of commercial as well as military aircraft. On the other hand, they exclude significant amounts of defense work carried on by companies and establishments classified in industries other than those listed above (e.g., the manufacture of military uniforms and the shipbuilding industry).²

Census data for "defense products" are based on separate reports on defense work filed by large defense contractors in the ordnance, communications, complete aircraft, aircraft parts, and shipbuilding industries. Thus, they differ from the "defense products industries" data in that they include defense activity in the shipbuilding industry and exclude nondefense work in the other industries covered. Defense products data cover work for the Department of Defense and exclude contracts for the National Aeronautics and Space Administration and the Atomic Energy Commission.

The DOD data are not strictly comparable in coverage with either the BLS or the Census data since the Defense Department figures (1) cover products of industries not included in the defense products category; (2) generally do not include non-defense activities (except that some series, such as contract awards, include activities by the Department of Defense on behalf of nondefense agencies); and (3) do not cover intermediate activities such as those related to subcontracting and supplying of parts. Thus, the Census Bureau data for manufacturers' new orders and shipments of defense products industries, for example, differ in coverage from the DOD contract awards and net outlays series.

The Department of Defense data are not comparable with Federal Government purchases of goods and services for national defense or the Treasury Department obligations and outlays data since the BEA and Treasury data cover defense-related activities of other agencies such as the Atomic Energy Commission, the Selective Service System, and the Office of Emergency Planning.

Projects to improve the comparability of the data collected by the Bureau of the Census, the Bureau of Labor Statistics, and the Department of Defense and to improve the separation of defense and nondefense activity for the Census and BLS data are being undertaken by the statistical agencies under the leadership of the Interagency Committee mentioned earlier in this report.

²See the Bureau of the Census publication *Shipments of Defense-Oriented Industries*, Current Industrial Reports, Series MA-175, for annual estimates of shipments by industry to the Department of Defense, the National Aeronautics and Space Administration, and the Atomic Energy Commission. Included also are industries not covered by the "defense products industries" category.

Variability of Data

Seasonal variations dominate the movements of many time series, and adjustments for average seasonal fluctuations are often necessary to bring out the underlying trends of the series. These seasonal adjustments allow for the effects of repetitive intrayear variations resulting primarily from normal differences in weather conditions and from various institutional arrangements. An additional adjustment is sometimes necessary for series which contain considerable variation resulting from the number of working or trading days in each month. As used in this report, the term "seasonal adjustment" includes trading-day adjustments where they have been made.

Most of the series in this report are shown in seasonally adjusted form. For Defense Department and BLS series, unadjusted data are also shown since they are not readily available elsewhere. Current seasonal adjustment factors are shown in appendix A.

The effect of seasonal adjustment in reducing the month-to-month variation in the data can be seen in appendix B. There, the first two columns show the average month-to-month percent change (without regard to sign) in the data before and after seasonal adjustment. Some series still show very irregular month-to-month movements after adjustment for seasonal variation. The measures in appendix B also indicate the month-to-month variation in the irregular and short-term trend components of the series. For many series, irregular movements tend to dominate 1- or 2-month comparisons, and the underlying short-term trend becomes dominant in comparisons over longer spans. The "months for cyclical dominance" (MCD) measure estimates the span of months required for the short-term trend to dominate the irregular component. Series with an MCD of 4 or more are supplemented with a moving average (with the

number of terms equal to MCD) in the charts. Data for these moving averages are listed in the basic data tables.

Guide to Charts and Tables

Most series are plotted on a standard ratio scale so that equal percent changes cover the same vertical distance. For these series, an increase of 100 percent covers approximately 1 inch. Arithmetic scales are used for series with zero or negative data, series which could approach zero (e.g., average overtime hours and layoff rate), and series expressed in percent.

In general, monthly data are plotted with a solid line and quarterly data are represented by a solid line with quarterly plot points. Quarterly series are also identified with a "Q" after their titles. For series which include a moving average, a dashed line is used for the actual monthly data and a solid line for the moving average. (The moving average values are centered within the span of months they are computed from.) Exceptions to this scheme may be necessary for special situations. Data apply to the whole period except for series designated "EOM" (end of month) or "EOQ" (end of quarter). The number in the box at the right of each series indicates the latest month (Arabic) or quarter (Roman) plotted. Parallel lines across a series indicate a break in continuity (e.g., data not available or change in series definition).

Tables 1, 2, 3, and 4 present current data for the series shown in the charts, including the moving averages. They also include unadjusted data for some series and data for related series which are not plotted. Table A summarizes the most recent data and percent changes for many of the series in the report. Historical data are shown on an intermittent basis in appendix C. (The index indicates the appropriate issue for each series.)

New Features and Changes for This Issue

1. Publication of *DEFENSE INDICATORS* will cease with this issue. See page ii for further details.
2. The following series will be shown in *BUSINESS CONDITIONS DIGEST* beginning with the July 1978 issue:

DI series number	BCD series number	Series title
200(a)	Same	Gross national product
200(b)	Same	Change in gross national product
264(a)	564	Federal Government purchases of goods and services for national defense
613	565	National defense purchases as a percent of gross national product
617	517	Defense Department gross obligations incurred
625	525	Defense Department military prime contract awards
643	543	Defense Department gross unpaid obligations outstanding
648	548	Manufacturers' new orders, defense products
657	557	Output of defense and space equipment
659	559	Manufacturers' inventories, defense products
661	561	Manufacturers' unfilled orders, defense products
670	570	Employment in defense products industries
677	577	Defense Department personnel, military, active duty
678	578	Defense Department personnel, civilian, direct hire employment
680	580	Defense Department net outlays, military functions and military assistance
688	588	Manufacturers' shipments, defense products

3. Users of *DEFENSE INDICATORS* may wish to keep individual series up to date. The table on page 29 of this issue provides information on sources from which the data are available.

4. The derivation of the series on employment, hours, and earnings (series 653, 654, 655, 670, 671, 673, and 675) requires additional computations which are listed on page 30 of this issue. A computer program that performs these computations is available; for further information contact Mr. Morton Somer, Statistical Indicators Division, Bureau of Economic Analysis, U.S. Department of Commerce (phone: 202-523-0525).

5. Appendix A has been updated to show seasonal factors through December 1978.

Table A. Summary of Recent Data and Current Percent Changes for Principal Defense Indicators

(Preliminary and revised figures are not identified here but the user may consult tables 1, 2, 3, and 4 where such identification is given)

Series title	Unit of measure	Basic data							Percent change				Series number	
		Average		3d Q 1977	4th Q 1977	1st Q 1978	Mar. 1978	Apr. 1978	May 1978	Mar. to Apr. 1978	Apr. to May 1978	3d Q to 4th Q 1977	4th Q to 1st Q 1978	
		1976	1977											
GROSS NATIONAL PRODUCT AND NATIONAL DEFENSE PURCHASES														
200. Gross national product (BEA)	Ann. rate, bil. dol.	1706.5	1889.6	1915.9	1961.8	1995.3	....	....	....	....	....	2.4	1.7	200
264. Federal Government purchases of goods and services, national defense (BEA)	do	86.8	94.3	95.6	98.5	99.5	....	....	....	....	....	3.0	1.0	264
613. National defense purchases as a percent of GNP (BEA) ¹	Percent	5.1	5.0	5.0	5.0	5.0	....	....	....	....	....	0.0	0.0	613
ADVANCE INDICATORS OF DEFENSE ACTIVITY														
Defense Dept. gross obligations incurred (DOD):														
617. Total	Ann. rate, bil. dol.	109.9	118.5	116.5	122.2	126.6	123.3	121.3	NA	-1.6	NA	4.9	3.6	617
621. Procurement	do	24.6	28.0	28.6	30.7	32.2	30.4	24.6	NA	-19.1	NA	7.3	4.9	621
623. Gross obligations incurred outside the Federal Government for national defense (Treasury)	do	115.3	123.7	112.9	129.1	NA	NA	NA	NA	NA	NA	14.3	NA	623
625. Defense Department military prime contract awards for work performed in the U.S. (DOD)	do	50.1	54.9	54.0	62.3	NA	NA	NA	NA	NA	NA	15.4	NA	625
643. Defense Department gross unpaid obligations outstanding (DOD)	Bil. dol., end of period	48.5	55.8	52.7	55.8	59.0	59.0	59.3	NA	0.5	NA	5.9	5.7	643
648. Mfrs.' new orders, defense products (Census)	Ann. rate, bil. dol.	29.7	34.4	26.7	49.1	40.0	53.8	48.4	47.4	-10.0	-2.1	83.9	-18.5	648
650. Manufacturers' new orders from the U.S. Government, aerospace industries (Census)	do	21.3	22.1	13.1	31.4	NA	....	....	....	....	....	139.7	NA	650
653. Average weekly overtime hours, production workers, defense products industries (BLS) ¹	Hours	2.5	3.0	2.9	3.3	3.5	3.6	3.5	NA	-0.1	NA	0.4	0.2	653
654. Accesions, defense products industries (BLS) ¹	Number per 100 employees	1.6	2.1	1.9	2.0	2.2	2.3	NA	NA	NA	NA	0.1	0.2	654
655. Layoffs, defense products industries (BLS) ¹	do	0.7	0.5	0.6	0.5	0.2	0.1	NA	NA	NA	NA	-0.1	-0.3	655
INTERMEDIATE AND FINAL INDICATORS OF DEFENSE ACTIVITY														
657. Output of defense and space equipment (FRB)	1967=100	78.4	79.6	80.7	79.2	80.1	81.5	81.5	81.5	0.0	0.0	-1.9	1.1	657
659. Mfrs.' inventories, defense products (Census)	Bil. dol., end of period	6.4	6.4	6.3	6.4	6.6	6.6	6.7	NA	1.5	NA	1.6	3.1	659
661. Mfrs.' unfilled orders, defense products (Census)	do	32.1	35.0	30.7	35.0	36.7	36.7	37.8	39.0	3.0	3.2	14.0	4.9	661
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census)	do	21.9	25.1	22.2	25.1	NA	....	....	....	....	....	13.1	NA	664
666. Defense Department progress payments outstanding (DOD) @	do	8.5	8.3	7.8	8.3	8.3	....	....	....	....	....	6.4	0.0	666
Employment in defense products industries (BLS):														
670. Total	Thousands	1,064	1,073	1,087	1,060	1,108	1,118	1,121	NA	0.3	NA	-2.5	4.5	670
671. Production workers	do	531	533	545	519	559	566	566	NA	0.0	NA	-4.8	7.7	671
673. Index of aggregate weekly hours, defense products industries (BLS)	1967=100	62.8	63.9	64.8	63.1	65.5	66.5	67.0	NA	0.8	NA	-2.6	3.8	673
675. Index of aggregate weekly payrolls, production workers, defense products industries (BLS)	do	101.2	111.4	115.4	110.7	120.7	124.6	128.1	NA	2.8	NA	-4.1	9.0	675
677. Military, active duty	Thousands, end of period	2,072	2,060	2,075	2,060	2,058	2,058	2,054	2,046	-0.2	NA	-0.7	-0.1	677
678. Civilian, direct hire employment	do	995	983	982	983	982	982	NA	NA	NA	NA	0.1	-0.1	678
Defense Department net outlays (DOD):														
680. Total, military functions and military assistance	Ann. rate, bil. dol.	88.3	97.9	96.8	104.0	98.8	101.0	112.1	99.7	11.0	-11.1	7.4	-5.0	680
682. Procurement	do	16.4	18.6	18.7	19.6	18.6	20.1	19.6	22.2	-2.5	13.3	4.8	-5.1	682
683. Budget outlays for the national defense function (Treasury)	do	89.7	99.9	98.6	105.9	107.3	119.3	108.9	109.0	-8.7	0.1	7.4	1.3	683
685. Defense Dept. personnel compensation (DOD)	do	35.5	37.2	37.3	38.4	39.0	39.4	39.3	NA	-0.3	NA	2.9	1.6	685
688. Mfrs.' shipments, defense products (Census)	do	26.6	31.5	31.4	31.9	33.3	34.6	35.3	32.3	2.0	-8.5	1.6	4.4	688
689. Manufacturers' shipments to the U.S. Government, aerospace industries (Census)	do	19.1	20.3	20.0	20.4	NA	....	....	....	....	....	2.0	NA	689
691. Ratio, manufacturers' unfilled orders to shipments, defense products (Census)	Ratio	13.4	12.1	11.9	12.6	12.8	12.7	12.9	14.5	1.6	12.4	5.9	1.6	691
693. Ratio, manufacturers' inventories to shipments, defense products (Census)	do	2.9	2.4	2.4	2.4	2.4	2.3	2.3	NA	0.0	NA	0.0	0.0	693
DEFENSE-RELATED BALANCE OF PAYMENTS COMPONENTS														
546. Transfers under U.S. military agency sales contracts-exports (BEA) ¹	Ann. rate, mil. dol.	5,213	7,079	7,672	6,188	7,420	....	....	....	....	....	-1,484	1,232	546
547. Direct defense expenditures-imports (BEA) ¹ @	do	4,901	5,745	5,804	6,168	6,192	....	....	....	....	....	364	24	547
696. U.S. Government cash receipts associated with military sales contracts (BEA) ¹ @	do	8,270	7,273	7,852	6,748	9,168	....	....	....	....	....	-1,104	2,420	696

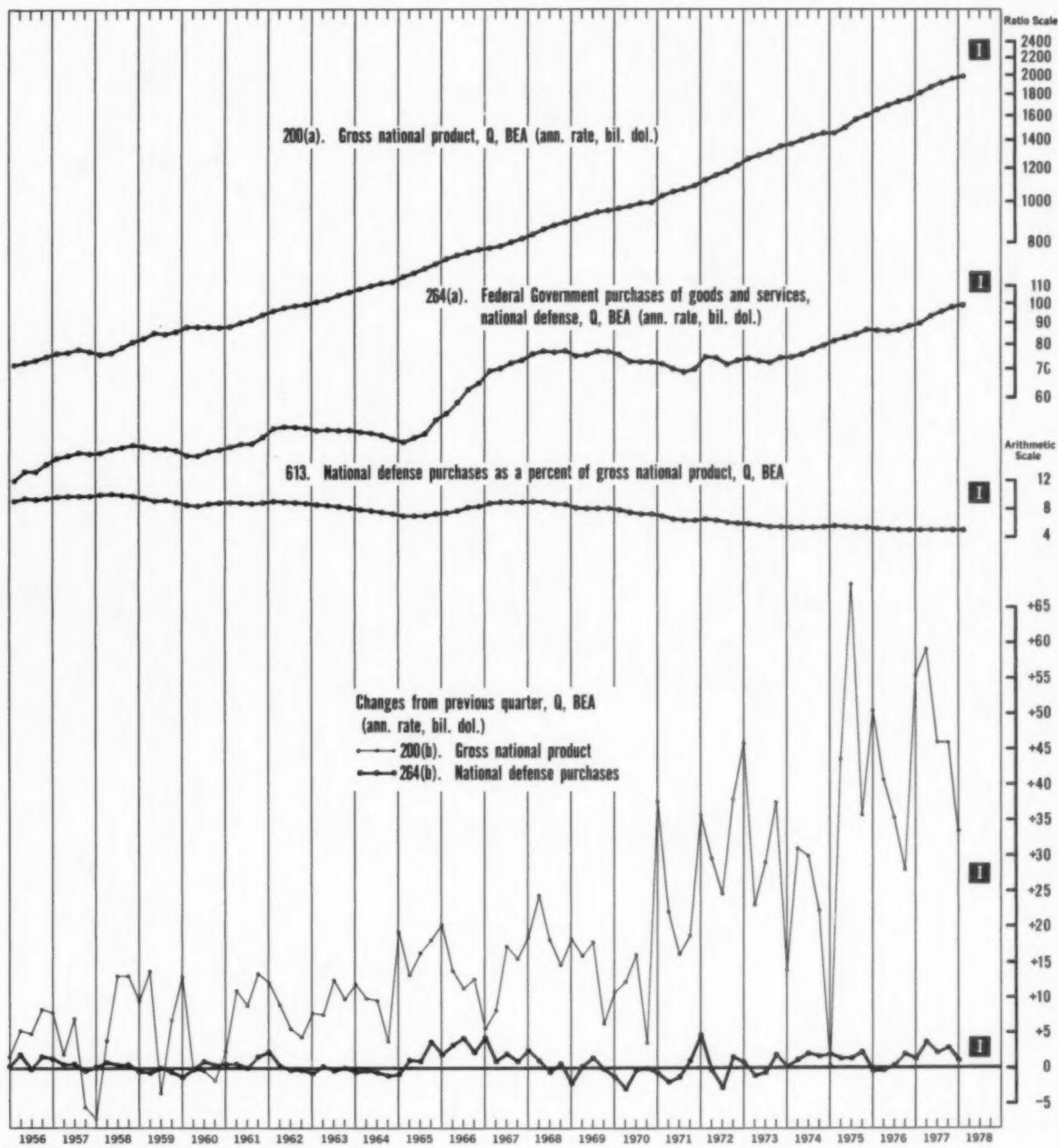
NOTE: This table is presented as a convenient summary of the current data for many of the indicators in this report. In many cases, data shown here are rounded to fewer digits or are in different units than those shown in tables 1, 2, 3, and 4. Where available, annual figures are those published by the source agencies; otherwise they (and the quarterly figures for monthly series) are averages or totals of the data as shown in the data tables. Series are seasonally adjusted except for those indicated by @, which appear to contain no seasonal movement.

NA = not available.

¹Differences rather than percent changes are shown for this series.

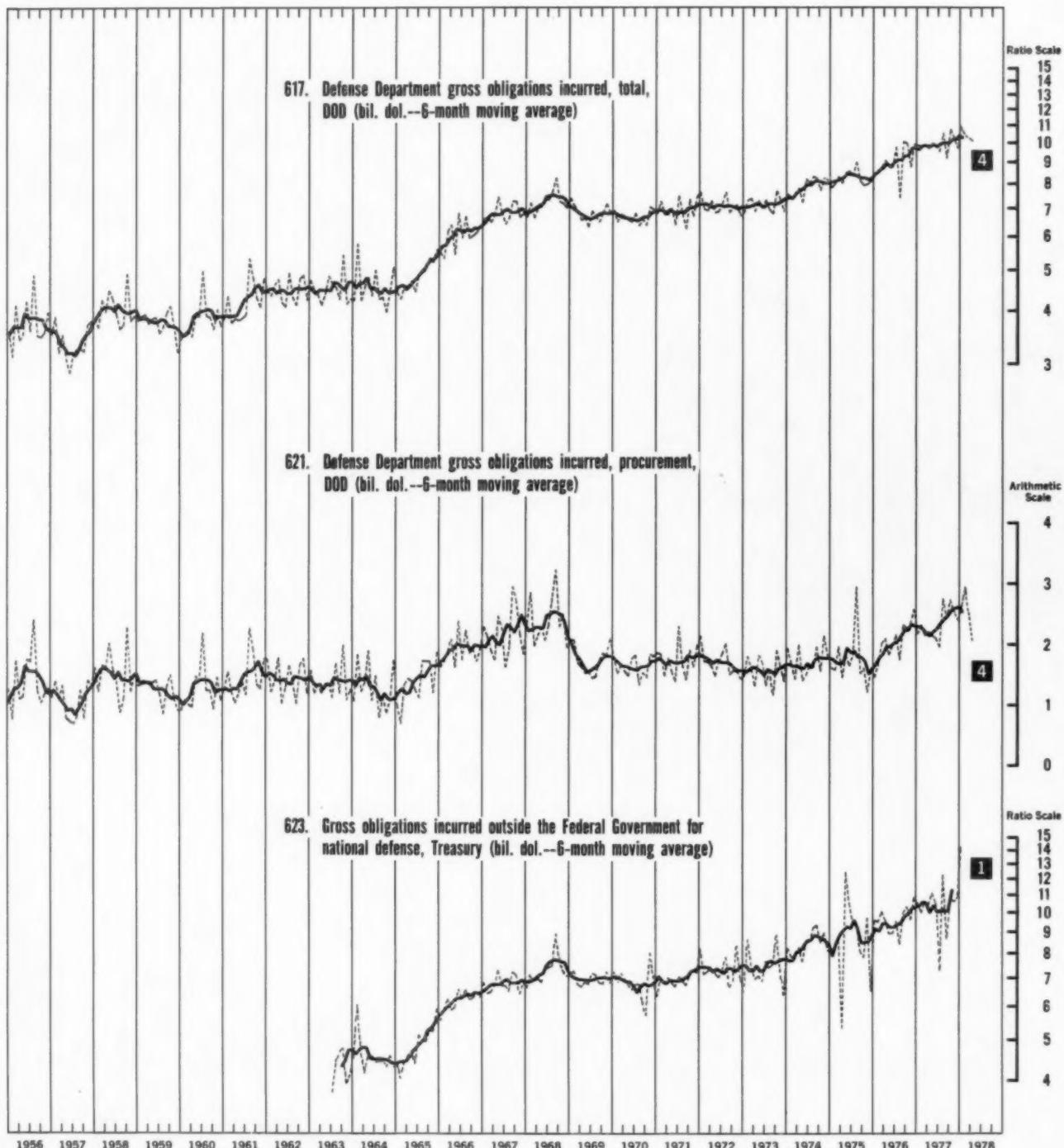
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Gross National Product and National Defense Purchases



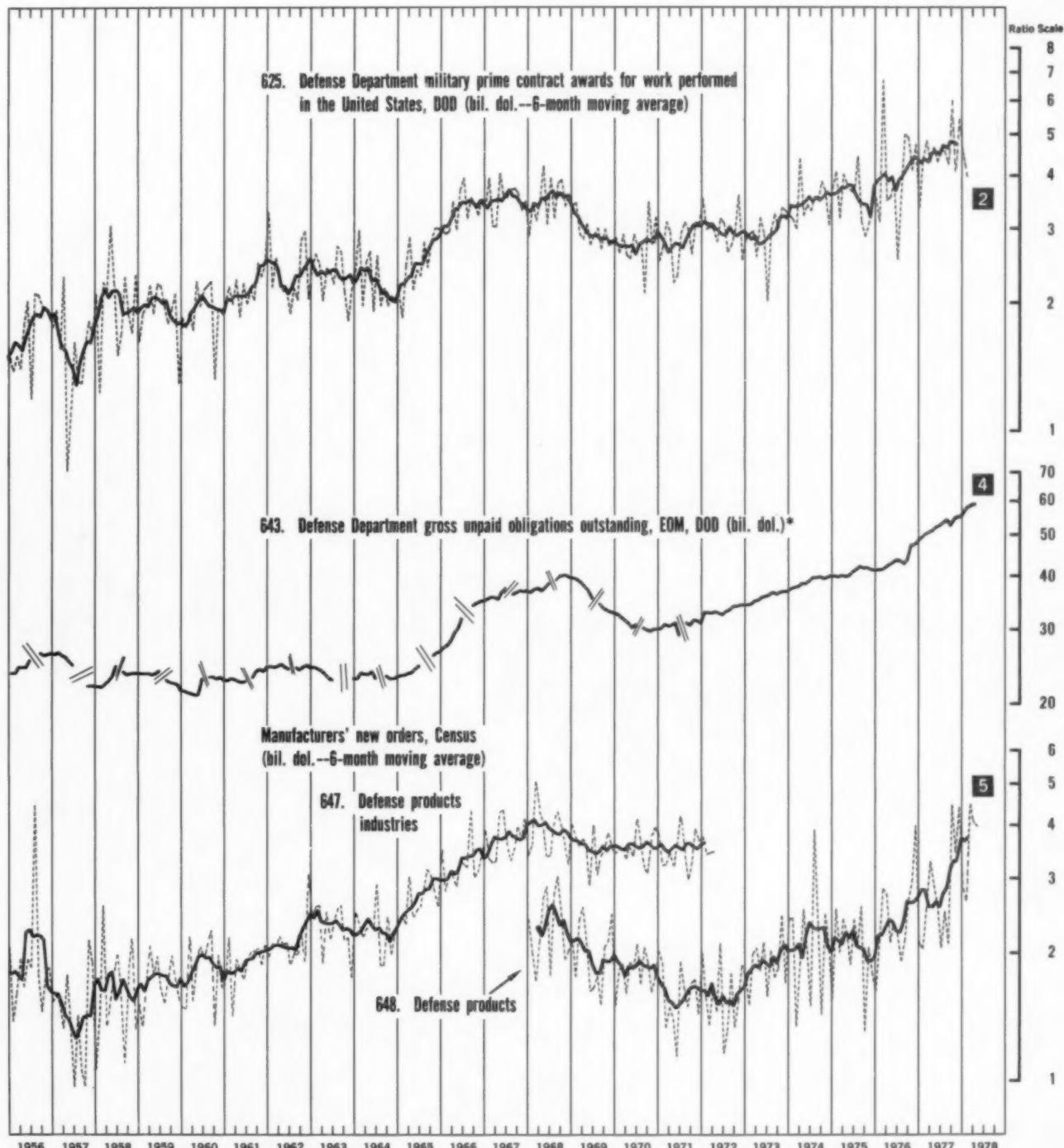
Current data for these series are shown on page 14.

CHART

2**Advance Indicators of Defense Activity**

Current data for these series are shown on pages 15 and 18.

Advance Indicators of Defense Activity--Continued



*Data for the following months are not available: July of 1956-71; August of 1958-59 and 1963-66;

September of 1957, 1963, and 1965; October and November of 1965.

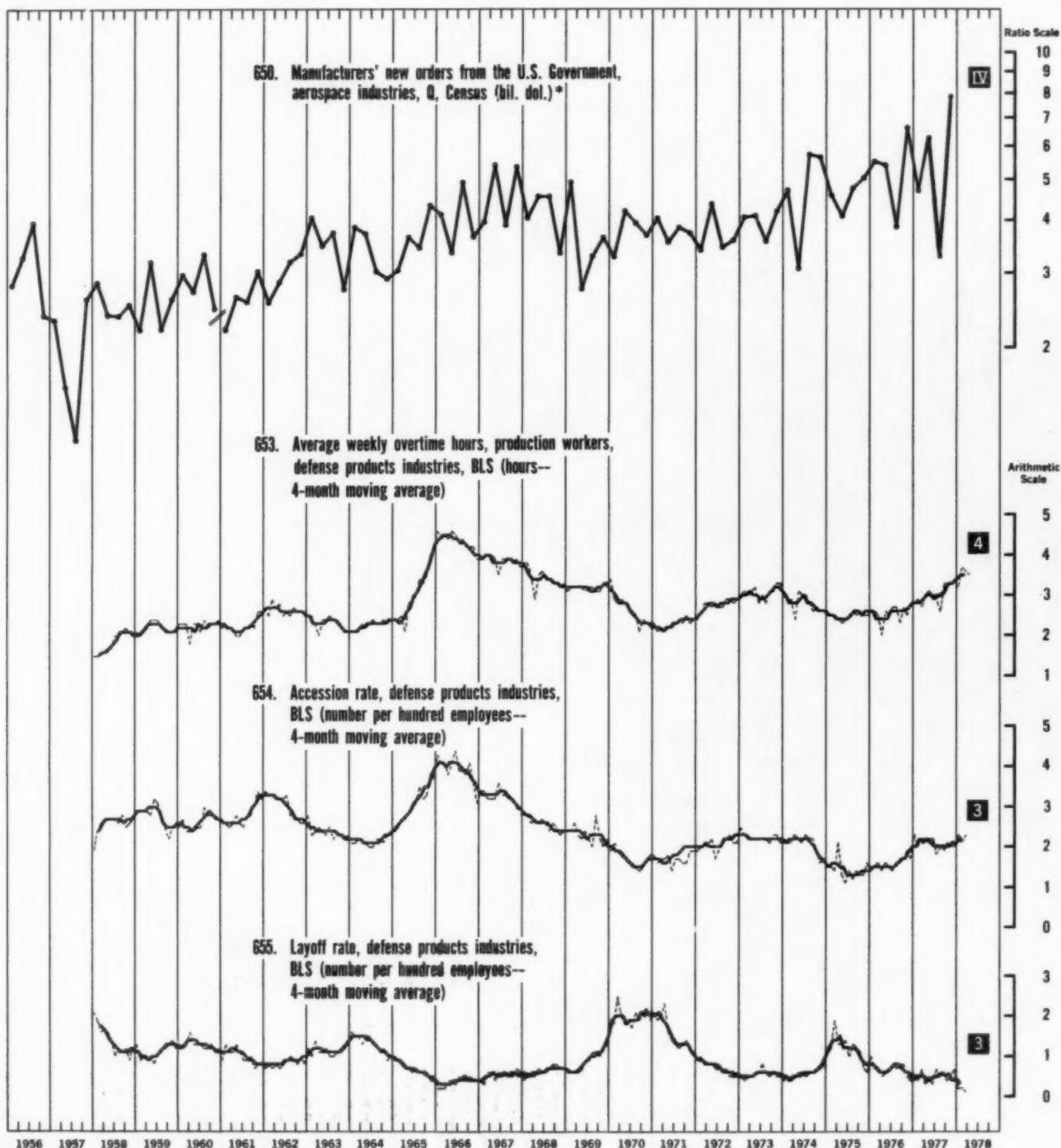
Current data for these series are shown on pages 16 and 20.

defense indicators

CHART

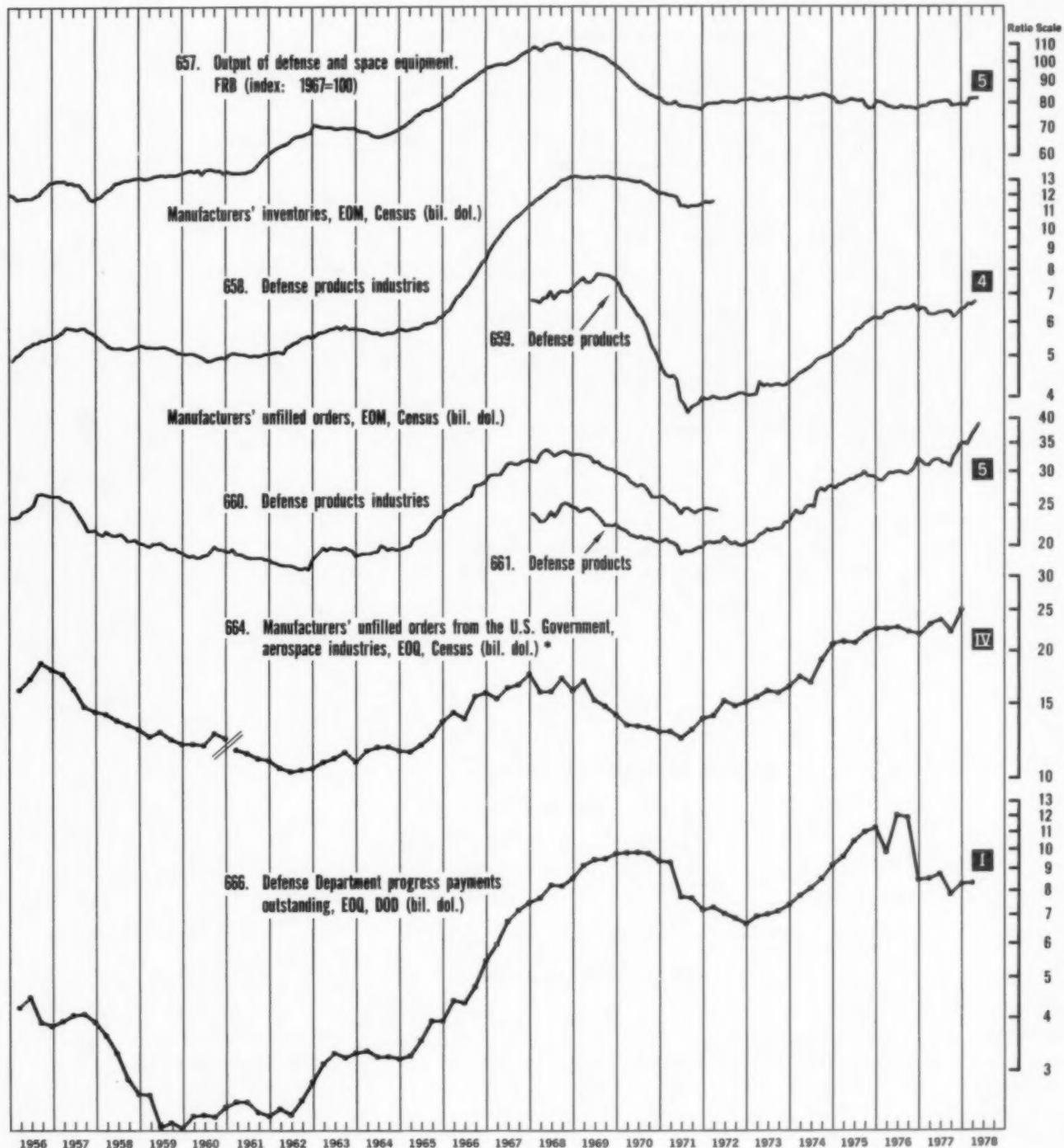
2

Advance Indicators of Defense Activity--Continued



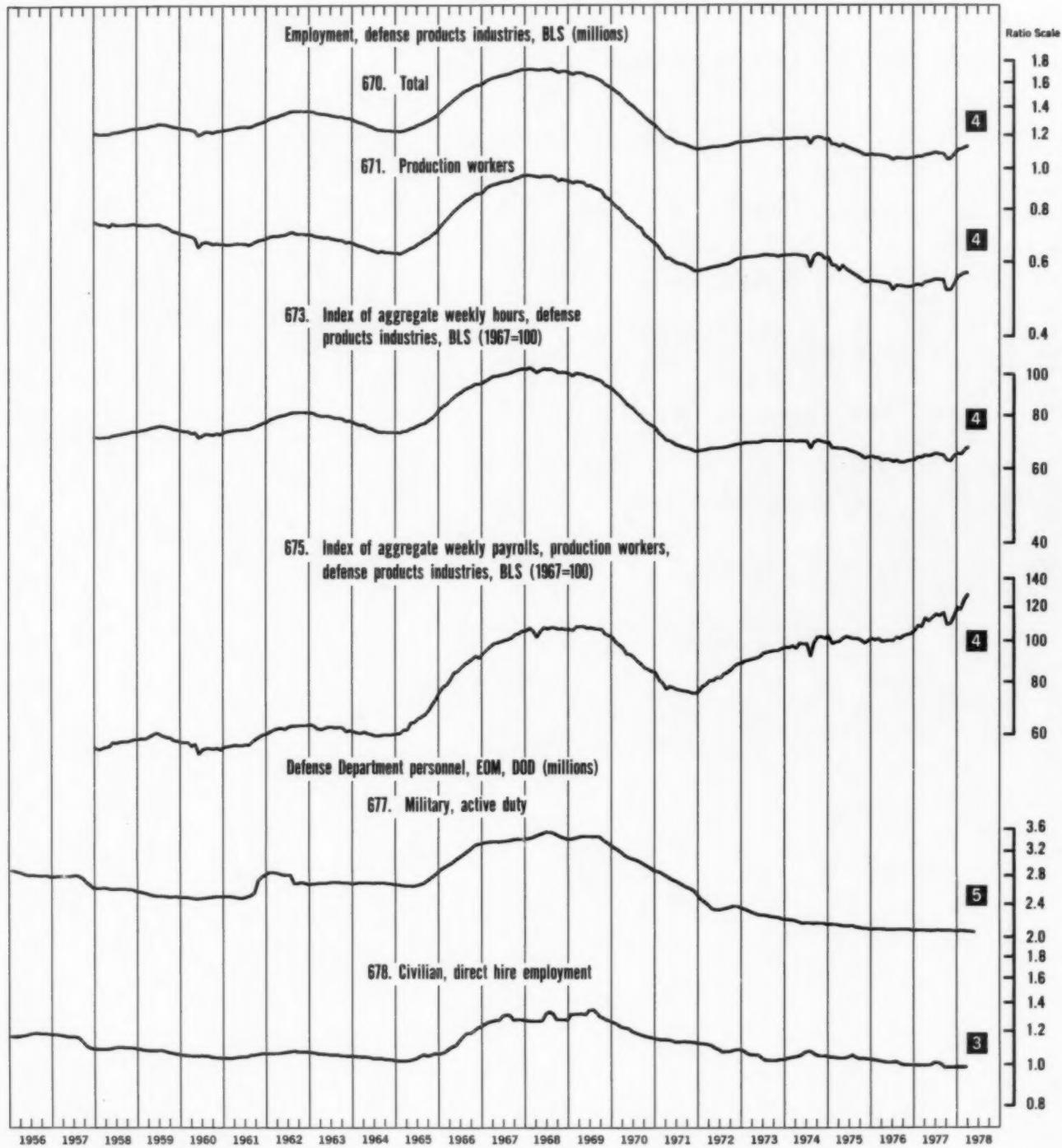
*Data prior to 1961 include orders from non-Government customers.
Current data for these series are shown on pages 20 and 21.

Intermediate and Final Indicators of Defense Activity



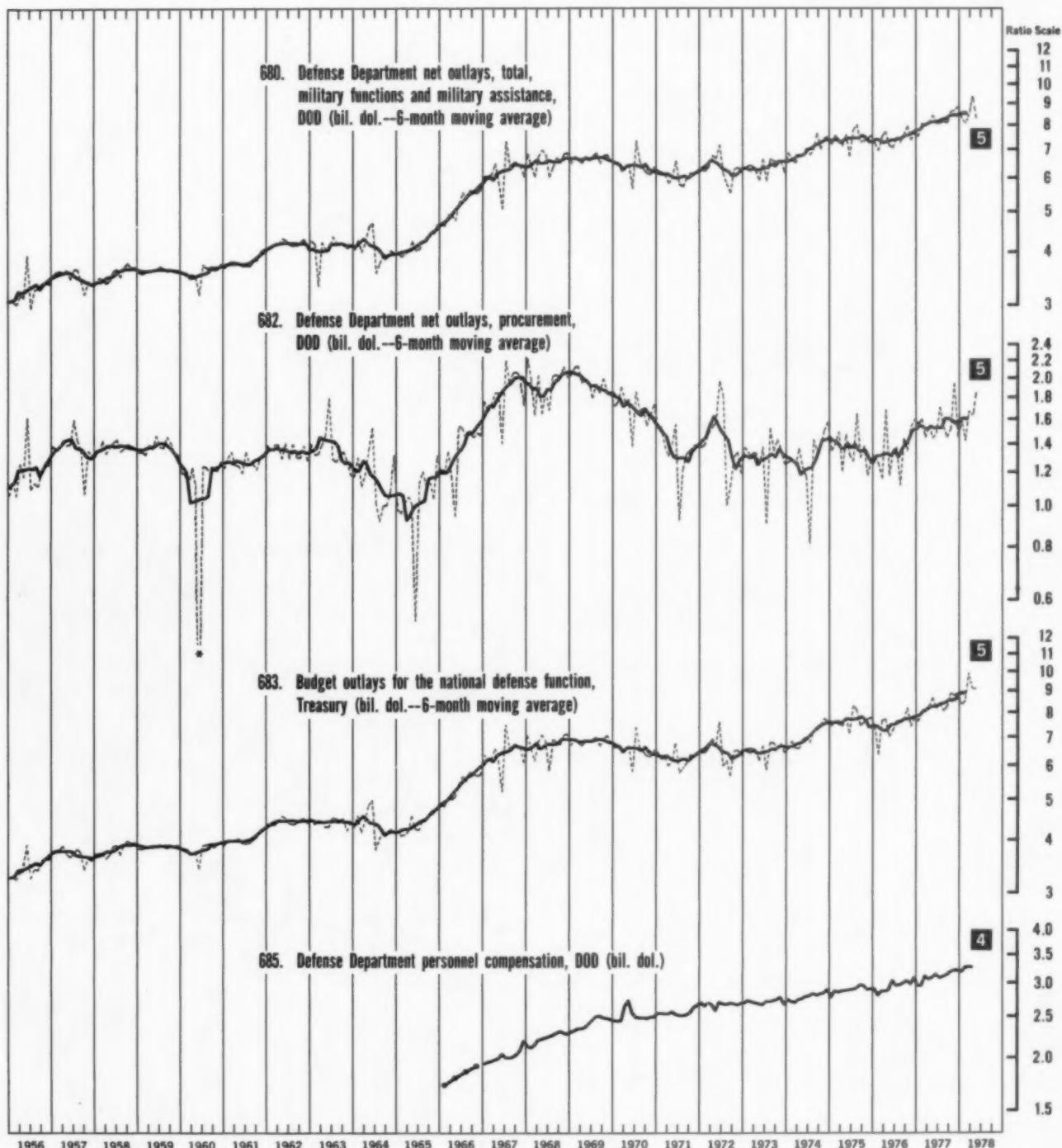
*Data prior to 1961 include orders from non-Government customers.
Current data for these series are shown on page 22.

CHART

3**Intermediate and Final Indicators of Defense Activity--Continued**

Current data for these series are shown on pages 22, 23, and 24.

Intermediate and Final Indicators of Defense Activity--Continued



*June 1960 figure for net expenditures for procurement is \$245 million.

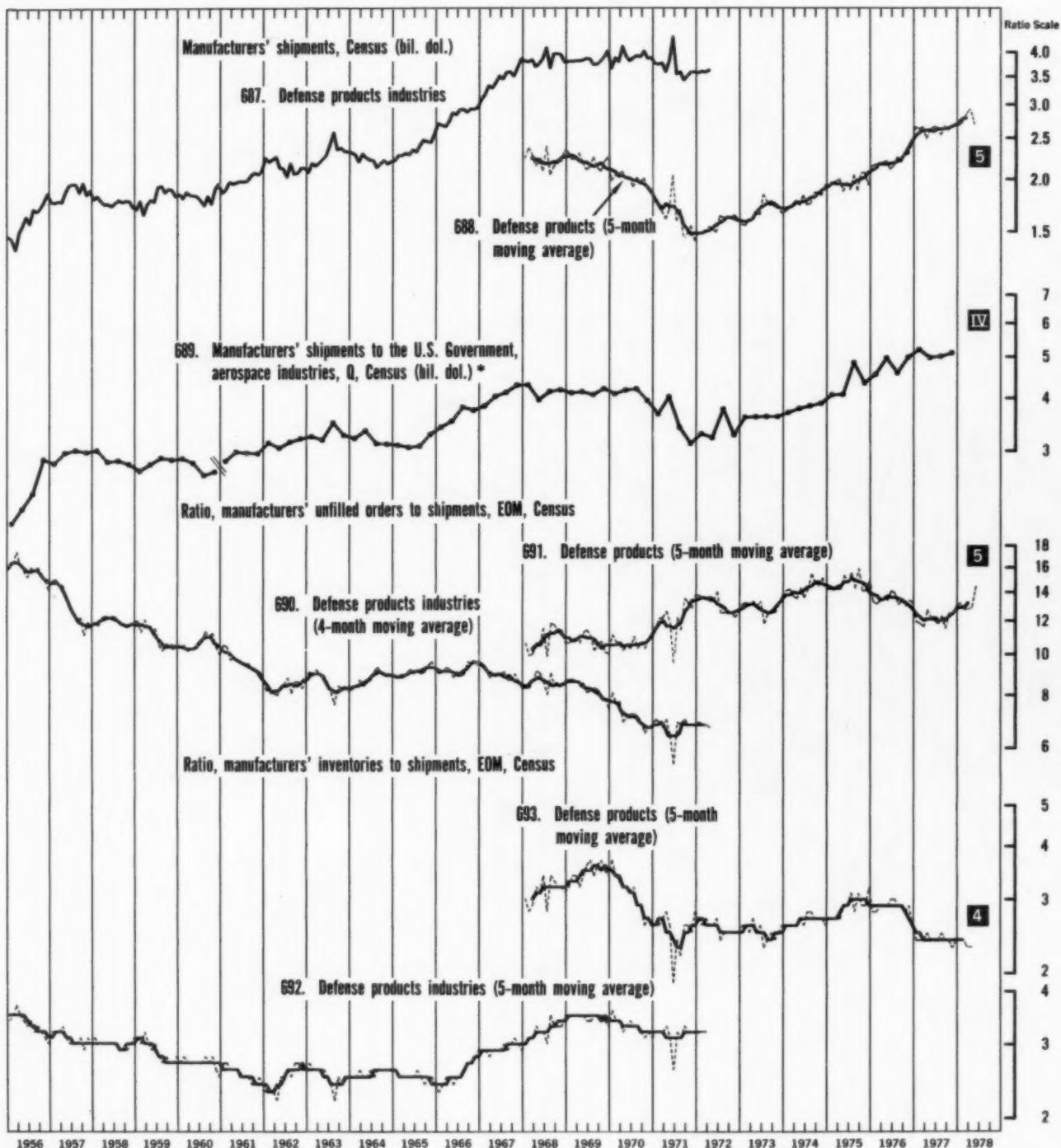
Current data for these series are shown on pages 24 and 25.

defense indicators

CHART

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Intermediate and Final Indicators of Defense Activity--Continued



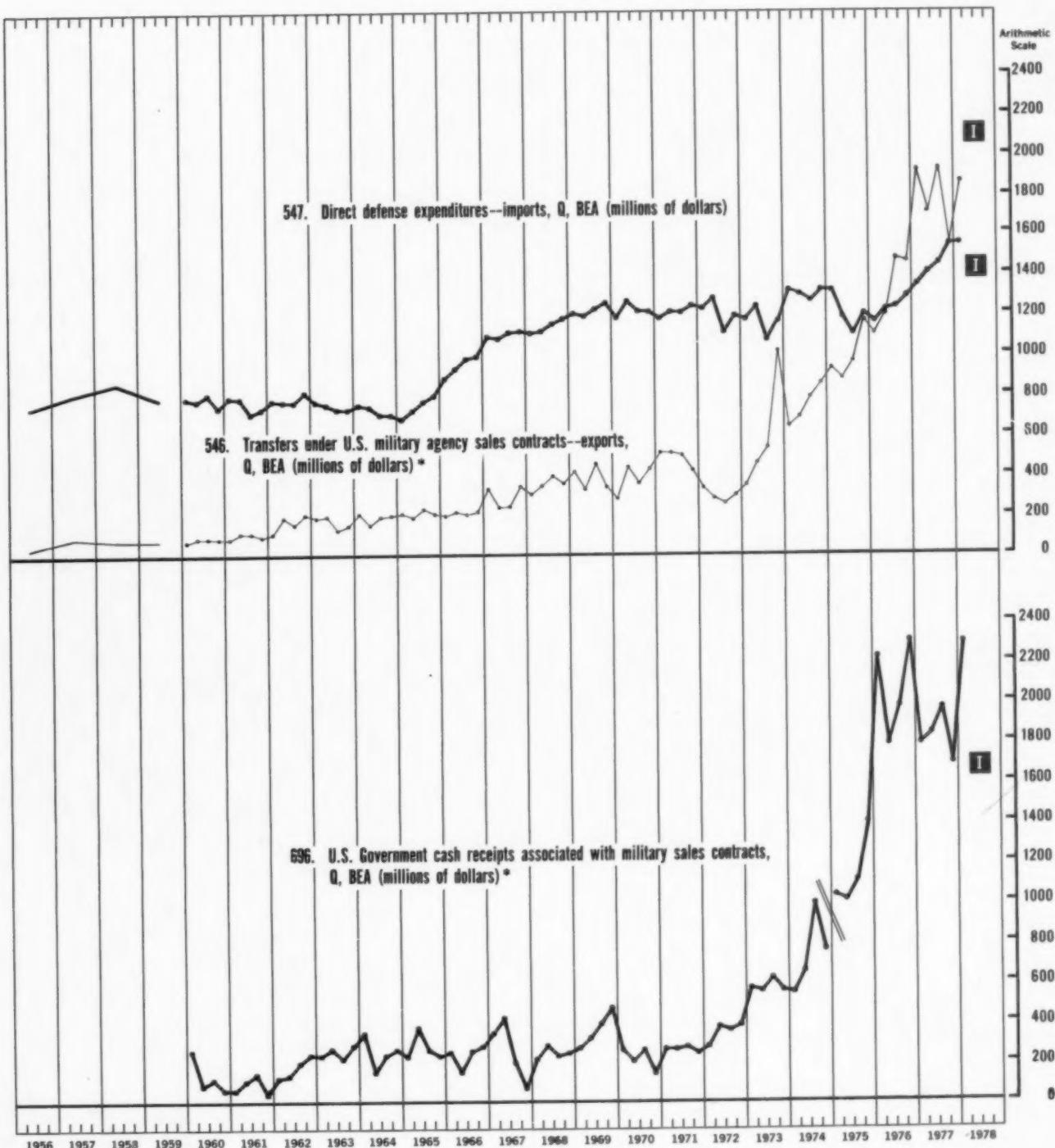
*Data prior to 1961 include shipments to non-Government customers.

Current data for these series are shown on page 26.

CHART

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Defense-Related Balance of Payments Components



* See footnotes 1 and 2 on page 27.
Current data for these series are shown on page 27.

defense indicators

TABLE
1

Gross National Product and National Defense Purchases

Year and quarter	200(a). Gross national product, BEA*	264(a). Federal Govern- ment purchases of goods and services, national defense, BEA*	613. National defense purchases as a percent of gross national product, BEA*	200(b). Change in gross national product, BEA*	264(b). Change in Federal Government purchases of goods and services, national defense, BEA*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)
1974					
First quarter.....	1,369.0	74.6	5.4	13.9	0.2
Second quarter.....	1,400.1	75.8	5.4	31.1	1.2
Third quarter.....	1,430.1	77.9	5.4	30.0	2.1
Fourth quarter.....	1,452.4	79.6	5.5	22.3	1.7
1975					
First quarter.....	1,453.0	81.6	5.6	0.6	2.0
Second quarter.....	1,496.6	83.0	5.5	43.6	1.4
Third quarter.....	1,564.9	84.4	5.4	68.3	1.4
Fourth quarter.....	1,600.7	86.7	5.4	35.8	2.3
1976					
First quarter.....	1,651.2	86.3	5.2	50.5	-0.4
Second quarter.....	1,691.9	86.0	5.1	40.7	-0.3
Third quarter.....	1,727.3	86.4	5.0	35.4	0.4
Fourth quarter.....	1,755.4	88.4	5.0	28.1	2.0
1977					
First quarter.....	1,810.8	89.7	5.0	55.4	1.3
Second quarter.....	1,869.9	93.4	5.0	59.1	3.7
Third quarter.....	1,915.9	95.6	5.0	46.0	2.2
Fourth quarter.....	1,961.8	98.5	5.0	45.9	2.9
1978					
First quarter.....	rl,995.3	99.5	5.0	r33.5	1.0

Note: All data on this page are seasonally adjusted. NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 5.)

Advance Indicators of Defense Activity

Year and month	Defense Department gross obligations incurred, DOD							
	617. Total			619. Operations		621. Procurement		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 6-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976								
January	8,652	8,393	8,245	6,010	5,621	1,697	1,453	1,594
February	7,206	8,442	8,436	4,745	5,233	1,664	1,672	1,676
March	8,241	8,727	8,574	4,995	5,467	2,093	2,014	1,779
April	8,677	9,033	8,679	5,946	5,810	1,688	2,096	1,841
May	6,824	8,764	8,901	4,828	5,551	1,155	1,828	1,958
June	11,318	8,713	8,725	5,949	5,041	3,218	1,983	1,971
July	9,592	9,727	8,939	6,362	6,317	1,812	2,157	2,022
August	7,427	7,384	9,086	5,055	5,100	1,458	1,747	2,048
September	9,839	10,015	9,081	6,120	5,969	2,152	2,318	2,134
October	12,636	9,914	9,275	7,447	5,948	2,312	2,253	2,233
November	9,620	8,733	9,287	5,561	5,722	2,497	2,344	2,236
December	9,903	9,874	9,684	5,341	5,750	2,855	2,580	2,331
1977								
January	9,838	9,804	9,660	6,352	5,921	2,138	2,175	2,302
February	8,787	9,763	9,620	5,501	6,090	2,206	2,313	2,294
March	8,958	9,873	9,817	5,537	6,058	2,087	2,146	2,260
April	10,091	9,671	9,811	6,365	5,980	2,640	2,203	2,180
May	8,141	9,919	9,760	5,344	6,167	1,908	2,143	2,143
June	9,451	9,835	9,880	5,739	6,081	2,077	2,098	2,216
July	8,332	9,498	9,759	6,195	6,093	1,249	1,956	2,264
August	8,763	10,486	9,930	5,337	6,071	1,861	2,752	2,352
September	11,642	9,143	9,978	6,517	5,503	3,511	2,430	2,421
October	13,810	10,697	9,947	7,786	6,232	2,898	2,734	2,468
November	11,106	10,208	10,191	6,336	6,459	2,719	2,553	2,573
December	9,594	9,652	10,178	5,705	6,188	2,677	2,386	2,605
1978								
January	10,991	10,958	10,366	7,291	6,745	2,501	2,581	2,622
February	9,327	10,410	10,268	5,639	6,266	2,771	2,945	2,508
March	9,491	10,272	(NA)	5,912	6,482	2,476	2,534	(NA)
April	10,168	10,107		6,637	6,273	2,445	2,046	
May	(NA)	(NA)		(NA)	(NA)	(NA)	(NA)	
June								
July								
August								
September								
October								
November								
December								

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 6.)

defense indicators

TABLE

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Advance Indicators of Defense Activity--Continued

Year and month	623. Gross obligations incurred outside the Federal Government for national defense, Treasury		Defense Department military prime contract awards for work performed in the United States, DOD							
			625. Total			626. Aircraft		627. Missile and space systems		
	Seasonally adjusted*	Moving average of seasonally adjusted data— 6-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976										
January	9,581	8,862	3,288	3,536	3,782	546	...	341	...	
February	9,495	9,156	2,529	3,101	3,886	356	2,744	278	1,347	
March	10,032	9,029	5,356	6,713	3,966	2,064	...	243	...	
April	9,594	p9,424	2,600	3,489	4,039	326	...	290	...	
May	8,932	p9,416	2,563	3,543	3,873	576	3,011	213	1,338	
June	p8,912	p9,237	6,843	3,854	3,964	1,562	...	602	...	
July	9,532	p9,229	2,592	2,535	3,676	416	...	287	...	
August	8,420	p9,348	3,969	3,652	3,911	914	2,189	422	1,257	
September	9,982	p9,463	4,934	4,985	4,006	799	...	521	...	
October	10,311	9,785	6,269	4,897	4,152	896	...	771	...	
November	9,620	9,949	4,580	4,114	4,289	1,140	2,877	1,060	1,547	
December	10,842	10,209	4,543	4,729	4,408	1,442	...	639	...	
1977										
January	10,519	10,316	3,360	3,354	4,380	955	...	355	...	
February	9,981	10,338	3,685	4,369	4,281	959	2,691	362	1,433	
March	10,624	10,583	4,325	4,819	4,371	680	...	610	...	
April	10,443	10,528	4,041	4,303	4,300	1,274	...	371	...	
May	11,089	9,993	3,778	4,654	4,512	852	2,797	309	1,514	
June	10,512	10,373	3,349	4,300	4,554	695	...	387	...	
July	7,311	10,044	3,696	4,624	4,460	1,280	...	354	...	
August	12,256	10,114	3,750	4,623	4,747	494	2,970	251	1,627	
September	8,655	10,024	7,371	4,255	p4,655	644	...	657	...	
October	10,859	10,084	7,764	6,028	p4,846	2,080	...	978	...	
November	10,550	11,224	p4,576	p4,100	p4,833	894	3,458	586	1,552	
December	10,871	(NA)	5,210	5,444	p4,726	1,259	...	933	...	
1978										
January	14,155	(NA)	p4,549	p4,549	(NA)	p1,297	...	p408	...	
February	(NA)		p3,344	p3,981	(NA)	p554	(NA)	p268	(NA)	
April										
May										
June										
July										
August										
September										
October										
November										
December										

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 6 and 7.)

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD—Continued						
	628. Ships, not seasonally adjusted	629. Weapons and ammunition		630. Electronic and communications equipment		631. Combat vehicles	
		Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976							
January	310	76	...	263	...	48	...
February	124	101	348	305	1,110	26	238
March	1,213	148	...	442	...	61	...
April	306	158	...	348	...	32	...
May	65	135	447	381	1,204	63	415
June	346	450	...	735	...	512	...
July	506	52	...	207	...	4	...
August	91	90	550	506	1,478	150	242
September	396	418	...	664	...	119	...
October	861	108	...	410	...	252	...
November	153	121	840	710	1,778	47	445
December	178	173	...	566	...	204	...
1977							
January	283	90	...	427	...	74	...
February	478	177	461	436	1,470	74	418
March	483	131	...	473	...	152	...
April	322	193	...	615	...	25	...
May	273	225	571	521	1,869	71	261
June	288	132	...	512	...	69	...
July	118	133	...	460	...	39	...
August	283	218	575	731	1,941	65	196
September	1,078	661	...	1,245	...	170	...
October	429	193	...	401	...	271	...
November	562	r178	r1,268	567	1,856	r68	r385
December	221	235	...	771	...	96	...
1978							
January	p489	p203	...	p623	...	p33	...
February	p377	p200	(NA)	p589	(NA)	p164	(NA)
March	(NA)	(NA)		(NA)		(NA)	
April							
May							
June							
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated.

defense indicators

TABLE

2

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD—Continued							
	632. Other hard goods		633. Soft goods		634. Construction		635. Services	
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976								
January	190	...	817	...	85	...	244	...
February	180	570	330	1,185	107	576	256	937
March	166	...	187	...	151	...	230	...
April	173	...	221	...	198	...	179	...
May	159	472	120	981	213	523	158	949
June	316	...	243	...	791	...	587	...
July	92	...	287	...	79	...	335	...
August	177	599	513	1,056	196	649	504	1,208
September	324	...	171	...	403	...	429	...
October	105	...	1,760	...	42	...	660	...
November	226	660	220	1,523	82	468	391	1,086
December	199	...	295	...	136	...	275	...
1977								
January	213	...	163	...	125	...	241	...
February	141	653	181	823	101	709	371	861
March	222	...	538	...	175	...	242	...
April	237	...	166	...	142	...	211	...
May	203	709	156	748	456	1,232	220	915
June	214	...	200	...	228	...	204	...
July	271	...	170	...	160	...	215	...
August	229	699	191	942	531	630	243	1,080
September	460	...	253	...	762	...	718	...
October	114	...	2,043	...	71	...	791	...
November	r159	r669	r252	r1,714	r126	r762	692	1,621
December	272	...	264	...	220	...	487	...
1978								
January	p194	...	p169	...	p367	...	p274	...
February	p192	(NA)	p181 (NA)	(NA)	p110 (NA)	(NA)	p254 (NA)	(NA)
April								
May								
June								
July								
August								
September								
October								
November								
December								

NA=not available; p=preliminary; r=revised; e=estimated.

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued					640. Defense Department military prime contract awards for work outside the United States, DOD	
	636. Contracts under \$10,000		637. Educational and nonprofit institutions		638. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), not seasonally adjusted		
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976							
January	327	...	39	...	2	286	...
February	416	1,175	48	180	2	95	760
March	405	...	44	...	2	139	...
April	300		68	...	1	147	...
May	430	1,124	50	268	0	93	658
June	625	...	73	...	1	306	...
July	253	...	74	...	0	208	...
August	351	1,194	55	195	0	132	612
September	615	...	74	...	1	347	...
October	201	...	203	...	0	575	...
November	303	1,066	127	259	0	107	612
December	358	...	78	...	0	175	...
1977							
January	365	...	69	...	0	362	...
February	344	1,254	61	225	0	74	632
March	528	...	91	...	0	191	...
April	420	...	65	...	0	101	...
May	451	1,292	41	216	0	103	649
June	384	...	36	...	0	157	...
July	449	...	47	...	0	190	...
August	464	1,254	50	223	0	174	907
September	643	...	80	...	0	613	...
October	254	...	139	...	0	633	...
November	r358	r1,146	r134	r257	0	r181	r779
December	315	...	137	...	0	277	...
1978							
January	p398	...	p94	...	p0	p289	...
February	p346	(NA)	p109	(NA)	p0	p131	(NA)
March	(NA)		(NA)		(NA)	(NA)	
April							
May							
June							
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated.

defense indicators

TABLE

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Advance Indicators of Defense Activity--Continued

Year and month	Defense Department gross unpaid obligations outstanding, DOD						648. Manufacturers' new orders, defense products, Census	650. Manufac- turers' new orders from the U.S. Govern- ment, aerospace industries, Census, seasonally adjusted*		
	643. Total		644. Operations		645. Procurement					
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted				
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)		
1978										
January	42,110	41,358	8,947	8,548	25,503	24,905	1,627	1,961		
February	41,512	41,459	8,538	8,681	25,586	24,841	2,132	2,201		
March	41,046	41,866	7,966	8,658	25,783	25,277	2,832	2,210		
April	41,029	42,494	8,253	8,827	25,606	25,657	2,751	2,305		
May	39,742	42,970	7,795	8,914	25,125	25,929	2,124	2,403		
June	42,152	43,612	8,037	8,780	26,508	26,482	2,362	2,368		
July	43,366	43,251	8,939	8,717	26,537	27,162	2,218	2,253		
August	42,525	42,558	8,569	8,610	26,346	26,802	1,921	2,239		
September	43,351	43,663	8,615	8,629	26,832	27,185	2,141	2,376		
October	47,890	47,366	10,624	10,364	27,632	27,827	2,666	2,648		
November	48,988	47,385	10,700	9,947	28,934	28,733	2,950	2,629		
December	50,354	48,497	10,374	9,898	29,348	29,202	3,989	2,651		
1977										
January	51,694	49,258	11,150	9,994	29,966	29,465	2,104	2,717		
February	52,016	50,229	11,122	10,404	30,485	29,946	2,055	2,819		
March	51,326	50,761	10,563	10,493	30,550	30,128	2,538	2,809		
April	52,309	51,236	10,978	10,499	31,330	31,551	3,279	2,576		
May	51,512	52,170	10,574	10,912	31,390	32,562	2,888	2,569		
June	51,549	52,625	10,320	11,094	31,449	31,449	2,590	2,644		
July	50,898	53,383	10,676	11,229	30,853	31,259	2,064	2,573		
August	50,133	54,262	9,792	11,449	30,791	31,292	2,508	2,770		
September	50,245	52,697	9,474	10,447	32,473	32,603	2,110	2,859		
October	55,512	54,775	11,412	11,124	33,723	33,455	4,459	3,160		
November	57,421	55,479	11,835	10,999	34,500	34,024	3,421	3,294		
December	58,002	55,771	11,634	11,112	35,312	35,032	4,396	3,319		
1978										
January	60,169	57,304	12,913	11,571	36,141	35,607	2,871	3,715		
February	60,503	58,401	12,537	11,739	37,182	36,669	2,656	r3,643		
March	59,635	58,986	11,714	11,644	37,425	36,799	4,485	p3,731		
April	60,594	59,348	12,280	11,751	37,999	38,037	r4,031	...		
May	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	p3,947	(NA)		
June										
July										
August										
September										
October										
November										
December										

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 7 and 8.)

Advance Indicators of Defense Activity--Continued

Year and month	653. Average weekly overtime hours, production workers, defense products industries, BLS			654. Accession rate, defense products industries, BLS			655. Layoff rate, defense products industries, BLS		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data— 4-month*
	(Hours)	(Hours)	(Hours)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)
1976									
January	2.5	2.6	2.6	1.3	1.4	1.4	1.1	1.0	0.8
February	2.5	2.6	2.6	1.3	1.5	1.5	0.8	0.7	0.8
March	2.4	2.5	2.4	1.5	1.6	1.5	0.8	0.7	0.7
April	1.7	2.0	2.4	1.2	1.4	1.5	0.6	0.5	0.6
May	2.3	2.6	2.4	1.6	1.6	1.5	0.6	0.6	0.6
June	2.5	2.5	2.4	2.1	1.5	1.5	0.6	0.7	0.6
July	2.4	2.7	2.6	1.6	1.4	1.5	0.7	0.8	0.7
August	2.7	2.7	2.6	2.0	1.6	1.5	0.6	0.7	0.8
September	2.6	2.3	2.6	1.9	1.6	1.6	0.6	0.8	0.8
October	2.8	2.7	2.6	1.8	1.7	1.7	0.8	0.8	0.7
November	2.8	2.5	2.6	1.6	1.9	1.7	0.5	0.5	0.6
December	3.2	2.8	2.7	0.9	1.7	1.9	0.3	0.4	0.6
1977									
January	2.7	2.8	2.8	2.2	2.3	2.0	0.6	0.5	0.4
February	2.8	2.9	2.8	1.8	2.0	2.0	0.5	0.4	0.5
March	2.5	2.7	2.8	2.1	2.2	2.2	0.9	0.7	0.5
April	2.6	3.0	2.9	2.0	2.2	2.1	0.4	0.3	0.5
May	2.9	3.1	3.0	2.3	2.2	2.2	0.5	0.5	0.4
June	3.0	3.0	3.0	2.8	2.2	2.1	0.3	0.3	0.4
July	2.8	3.0	2.9	2.0	1.8	2.0	0.6	0.7	0.5
August	2.7	2.6	3.0	2.4	2.0	2.0	0.4	0.5	0.5
September	3.4	3.2	3.0	2.2	1.9	2.0	0.5	0.6	0.6
October	3.4	3.2	3.1	2.2	2.1	2.0	0.4	0.4	0.5
November	3.5	3.3	3.3	1.7	2.0	2.0	0.4	0.5	0.6
December	3.8	3.4	3.3	1.2	2.0	2.1	0.5	0.7	0.4
1978									
January	3.1	3.2	3.4	2.2	2.3	2.1	0.3	0.2	0.4
February	3.6	3.7	r3.5	1.9	2.1	2.2	0.3	0.2	0.3
March	r3.4	r3.6	p3.5	2.2	2.3	(NA)	0.4	0.1	(NA)
April	p3.1 (NA)	p3.5 (NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
May									
June									
July									
August									
September									
October									
November									
December									

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 8.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity

Year and month	657. Output of defense and space equipment, FRB, seasonally adjusted*	659. Manufacturers' inventories, defense products, Census, seasonally adjusted*	661. Manufacturers' unfilled orders, defense products, Census, seasonally adjusted*	664. Manufacturers' unfilled orders from the U.S. Gov- ernment, aerospace industries, Census, seasonally adjusted*	666. Defense Department progress payments out- standing, DOD, not seasonally adjusted*	670. Employment in defense products industries, total, BLS	
	(Index: 1967=100)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Thous.)	(Thous.)
1976							
January	80.5	6,094	28,483	...	...	1,084	1,081
February	80.1	6,122	28,450	...	...	1,075	1,076
March	79.5	6,274	29,114	22,498	9,848	1,071	1,077
April	78.4	6,324	29,676	...	...	1,066	1,072
May	78.1	6,355	29,592	...	...	1,061	1,070
June	77.5	6,436	29,842	22,692	12,041	1,060	1,064
July	77.5	6,453	29,905	...	...	1,043	1,050
August	78.5	6,425	29,573	...	...	1,053	1,060
September	77.6	6,445	29,519	22,152	11,881	1,062	1,059
October	78.0	6,463	29,887	...	...	1,062	1,056
November	77.6	6,557	30,549	...	...	1,066	1,054
December	77.2	6,352	32,102	21,866	8,465	1,070	1,060
1977							
January	78.0	6,458	31,556	...	...	1,067	1,062
February	78.5	6,423	30,988	...	...	1,067	1,069
March	78.5	6,248	30,875	23,089	8,521	1,061	1,067
April	79.9	6,227	31,659	...	...	1,071	1,077
May	80.0	6,242	31,936	...	...	1,071	1,079
June	80.3	6,311	31,873	23,648	8,735	1,083	1,086
July	80.4	6,310	31,292	...	...	1,084	1,092
August	80.8	6,351	31,259	...	...	1,077	1,084
September	80.9	6,318	30,707	22,180	7,838	1,089	1,084
October	78.9	6,149	32,558	...	...	1,056	1,050
November	79.3	6,263	33,293	...	...	1,062	1,053
December	79.5	6,403	35,006	p25,079	8,262	1,087	1,077
1978							
January	79.7	6,454	35,200	...	...	1,106	1,100
February	r79.2	6,636	35,087	...	...	1,105	1,105
March	r81.5	6,621	36,690	(NA)	8,275	r1,113	1,118
April	r81.5	6,738	r37,782			r1,116	
May	p81.5	(NA)	p39,034			(NA)	r1,121
June							
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 9 and 10.)

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	671. Employment in defense products industries, production workers, BLS		673. Index of aggregate weekly hours, defense products industries, BLS		675. Index of aggregate weekly payrolls, production workers, defense products industries, BLS	
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*
	(Thous.)	(Thous.)	(1967=100)	(1967=100)	(1967=100)	(1967=100)
1976						
January	545	542	64.1	64.1	101.3	101.1
February	540	540	63.5	63.5	100.7	100.4
March	537	539	63.3	63.6	100.8	101.1
April	533	537	62.0	62.7	96.1	99.3
May	530	536	62.6	63.0	99.2	100.0
June	529	533	62.6	62.8	99.4	100.2
July	510	516	61.2	62.2	96.0	99.8
August	520	528	62.0	62.7	99.2	101.8
September	529	528	62.4	62.0	101.9	101.1
October	529	525	62.4	62.0	104.0	102.6
November	532	523	63.5	62.5	106.5	103.4
December	533	524	64.1	62.7	109.2	103.8
1977						
January	533	529	63.0	62.8	106.4	105.5
February	531	531	63.6	63.7	108.5	108.4
March	525	528	63.3	63.6	107.4	107.8
April	533	538	63.5	64.5	109.2	113.1
May	534	539	63.8	64.1	110.3	111.2
June	541	543	64.6	64.6	112.7	113.5
July	539	546	64.0	65.1	110.9	115.3
August	537	545	64.0	64.7	111.5	114.5
September	547	545	65.0	64.6	117.3	116.4
October	517	512	63.0	62.6	110.1	108.6
November	522	515	63.5	62.5	112.7	109.6
December	539	531	65.4	64.1	119.6	114.0
1978						
January	558	552	65.5	65.3	120.6	119.4
February	r558	r558	64.6	64.6	r118.7	r118.0
March	562	566	r66.3	r66.5	r124.1	r124.6
April	563	r566	r66.2	r67.0	r123.9	r128.1
May	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
June						
July						
August						
September						
October						
November						
December						

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 10.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department personnel, DOD		Defense Department net outlays, DOD				
	677. Military, active duty, not seasonally adjusted*	678. Civilian, direct hire employment, not seasonally adjusted*	680. Total, military functions and military assistance			681. Operations	
			Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	Not seasonally adjusted	Seasonally adjusted
	(Thous.)	(Thous.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976							
January	2,092	1,023	6,649	7,175	7,287	4,887	4,913
February	2,093	1,019	6,962	6,908	7,351	4,848	4,904
March	2,090	1,016	7,642	7,477	7,309	5,026	5,028
April	2,087	1,011	7,872	7,672	7,227	5,297	5,218
May	2,081	1,010	7,042	7,101	7,269	4,888	5,004
June	2,082	1,010	7,843	7,027	7,322	5,170	5,033
July	2,087	1,014	7,433	7,426	7,331	5,050	5,101
August	2,085	1,006	7,163	7,229	7,368	5,059	5,095
September	2,084	997	7,513	7,530	7,406	5,457	5,312
October	2,086	995	7,478	7,892	7,511	4,984	4,904
November	2,082	996	7,301	7,330	7,519	5,277	5,242
December	2,072	995	7,422	7,659	7,651	5,356	5,393
1977							
January	2,077	994	6,979	7,476	7,723	5,262	5,376
February	2,078	995	8,004	8,017	7,752	5,202	7,296
March	2,075	995	8,454	7,961	7,931	5,529	5,493
April	2,071	995	7,850	8,069	7,992	5,488	5,470
May	2,070	997	8,412	8,404	8,086	5,269	5,483
June	2,075	1,009	8,266	8,023	8,103	5,540	5,569
July	2,079	1,008	7,880	8,040	8,117	5,389	5,412
August	2,073	998	8,244	8,119	8,199	5,505	5,492
September	2,075	982	8,795	8,046	8,240	5,820	5,469
October	2,072	983	7,927	8,563	8,367	5,583	5,587
November	2,069	985	8,836	8,652	8,395	5,582	5,430
December	2,060	983	8,220	8,782	8,386	5,619	5,884
1978							
January	2,065	982	7,840	8,209	8,448	5,677	5,734
February	2,062	982	8,037	8,061	r8,577	5,574	5,694
March	2,058	982	9,168	8,419	p8,520	6,192	5,960
April	2,054	(NA)	r8,815	r9,338		r5,648	r5,711
May	p2,046		p8,466	p8,308		p5,797	p5,958
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 10 and 11.)

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department net outlays, DOD—Continued			683. Budget outlays for the national defense function, Treasury		685. Defense Department personnel compensation, DOD	
	682. Procurement			Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	Not seasonally adjusted	Seasonally adjusted*
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*				
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1976							
January	1,363	1,301	1,257	7,385	7,402	3,018	2,907
February	1,227	1,253	1,307	6,363	7,425	2,820	2,804
March	1,195	1,157	1,308	7,643	7,312	2,887	2,866
April	1,792	1,677	1,316	7,693	7,226	2,845	2,861
May	1,092	1,178	1,327	7,016	7,263	2,851	2,889
June	1,418	1,331	1,304	7,255	7,474	3,007	3,036
July	1,347	1,365	1,350	7,610	7,479	2,963	2,960
August	1,063	1,114	1,294	7,628	7,558	2,962	2,962
September	1,356	1,432	1,353	7,671	7,622	2,978	2,997
October	1,337	1,344	1,397	8,170	7,716	3,026	3,037
November	1,502	1,534	1,428	7,400	7,717	3,020	2,978
December	1,745	1,591	1,507	7,817	7,779	3,097	3,088
1977							
January	1,524	1,553	1,510	7,618	7,837	3,034	2,951
February	1,570	1,590	1,541	7,996	7,852	2,886	2,951
March	1,511	1,445	1,525	8,021	8,060	3,137	3,118
April	1,558	1,534	1,506	8,261	8,120	3,008	3,063
May	1,324	1,438	1,531	8,648	8,244	3,084	3,087
June	1,643	1,478	1,520	8,178	8,255	3,112	3,143
July	1,572	1,699	1,521	8,357	8,291	3,054	3,082
August	1,521	1,527	1,518	8,064	8,392	3,146	3,109
September	1,372	1,448	1,600	8,235	8,410	3,108	3,136
October	1,512	1,515	1,595	8,867	8,523	3,170	3,180
November	1,877	1,930	1,574	8,757	8,519	3,240	3,208
December	1,579	1,450	1,555	8,860	8,600	3,235	3,219
1978							
January	1,538	1,576	1,592	8,332	8,885	3,275	3,183
February	1,394	1,410	1,612	8,548	8,919	p3,171	p3,272
March	1,789	1,674	p1,599	9,945	8,973	3,299	3,283
April	1,579	1,635		9,073		p3,161	p3,276
May	p1,771	p1,847		9,080		(NA)	(NA)
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 11.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	688. Manufacturers' shipments, defense products, Census		689. Manufacturers' shipments to the U.S. Government, aerospace industries, Census, seasonally adjusted*	691. Ratio, manufacturers' unfilled orders to shipments, defense products, Census		693. Ratio, manufacturers' inventories to shipments, defense products, Census	
	Seasonally adjusted*	Moving average of seasonally adjusted data—5-month*		Seasonally adjusted*	Moving average of seasonally adjusted data—5-month*	Seasonally adjusted*	Moving average of seasonally adjusted data—5-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Ratio)	(Ratio)	(Ratio)	(Ratio)
1976							
January	2,147	2,098	...	13.3	13.8	2.8	2.9
February	2,165	2,121	4,544	13.1	13.7	2.8	2.9
March	2,168	2,175	...	13.4	13.4	2.9	2.9
April	2,189	2,168	...	13.6	13.5	2.9	2.9
May	2,208	2,166	4,952	13.4	13.7	2.9	2.9
June	2,112	2,183	...	14.1	13.6	3.0	2.9
July	2,155	2,185	...	13.9	13.6	3.0	2.9
August	2,253	2,203	4,587	13.1	13.5	2.9	2.9
September	2,195	2,238	...	13.4	13.4	2.9	2.9
October	2,298	2,294	...	13.0	13.2	2.8	2.8
November	2,288	2,373	4,983	13.4	13.0	2.9	2.7
December	2,436	2,459	...	13.2	12.7	2.6	2.6
1977							
January	2,650	2,530	...	11.9	12.4	2.4	2.5
February	2,623	2,571	5,191	11.8	12.2	2.4	2.5
March	2,651	2,606	...	11.6	12.0	2.4	2.4
April	2,495	2,607	...	12.7	12.1	2.5	2.4
May	2,611	2,611	4,971	12.2	12.1	2.4	2.4
June	2,653	2,589	...	12.0	12.2	2.4	2.4
July	2,645	2,622	...	11.8	12.0	2.4	2.4
August	2,541	2,622	5,001	12.3	12.0	2.5	2.4
September	2,662	2,628	...	11.5	12.1	2.4	2.4
October	2,608	2,636	...	12.5	12.3	2.4	2.4
November	2,686	2,663	p5,095	12.4	12.5	2.3	2.4
December	2,683	2,685	...	13.0	12.7	2.4	2.4
1978							
January	2,678	2,740	...	13.1	12.8	2.4	2.4
February	2,769	r2,790	(NA)	12.7	r12.9	2.4	2.4
March	2,883	p2,792		12.7	p13.2	2.3	(NA)
April	r2,938			r12.9		2.3	
May	p2,694			p14.5			
June							
July							
August							
September							
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 12.)

Defense-Related Balance of Payments Components

Year and quarter	546. Transfers under U.S. military agency sales contracts (exports), BEA ¹		547. Direct defense expenditures (imports), BEA, not seasonally adjusted ²	696. U.S. Government cash receipts associated with military sales contracts, BEA ²	
	Not seasonally adjusted	Seasonally adjusted*		Not seasonally * adjusted	Seasonally adjusted*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1974		(^a)	(^a)	(^a)	
First quarter	644	638	1,153	497	546
Second quarter	738	683	1,298	642	650
Third quarter	720	781	1,265	995	990
Fourth quarter	850	850	rl,316	808	756
1975					(NA)
First quarter	946	924	1,317	rl,028	
Second quarter	888	874	1,185	rl,005	
Third quarter	902	957	1,096	rl,101	
Fourth quarter	1,183	1,164	1,198	rl,392	
1976					
First quarter	1,132	1,095	rl,159	r2,218	
Second quarter	1,193	1,189	rl,219	rl,783	
Third quarter	1,403	1,472	rl,235	rl,972	
Fourth quarter	1,486	1,457	rl,288	r2,297	
1977					
First quarter	1,912	rl,912	rl,344	rl,787	
Second quarter	1,702	rl,702	rl,407	rl,836	
Third quarter	1,918	rl,918	rl,451	rl,963	
Fourth quarter	1,547	rl,547	rl,542	rl,687	
1978					
First quarter	pl,855	pl,855	pl,548	pl,292	
Second quarter					
Third quarter					
Fourth quarter					

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 13.)

¹Includes deliveries for which Israel has been released from its contractual liability to pay.

²Excludes funds made available to release Israel from its contractual liability to pay for defense articles and services purchased through military sales contracts. Quarterly expenditures for such purpose under Public Law 93-199 and subsequent legislation amounted to (in millions): 1974, IIQ, \$623; IIIQ, \$223; IVQ, \$91; 1975, IQ, \$187; IIQ, \$124; IIIQ, \$83; IVQ, \$242; 1976, IQ, \$16; IIQ, \$100; IIIQ, \$743; IVQ, \$5; 1977, IQ, \$138; IIQ, \$245; IIIQ, \$117; IVQ, \$0; 1978, IQ, \$179.

*This series has been revised to reflect the source agency's annual updating of the basic statistics.

Appendix A. SEASONAL ADJUSTMENT FACTORS

Series title	1978											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
MONTHLY SERIES												
Defense Department gross obligations incurred:												
617. Total ¹	100.3	89.6	92.4	100.6	83.8	97.0	87.9	84.0	124.2	130.0	108.8	99.4
619. Operations ¹	108.1	90.0	91.2	105.8	87.2	94.2	100.7	88.9	117.7	126.2	98.1	92.2
621. Procurement.....	96.9	94.1	97.7	119.5	87.7	99.4	64.0	67.8	144.3	107.6	106.5	112.2
623. Gross obligations incurred outside the Federal Government for national defense ¹	95.0	95.9	98.2	104.4	80.8	104.6	91.6	89.8	123.0	116.4	103.8	97.3
625. Defense Department military prime contract awards for work performed in the United States.....	100.0	84.0	89.2	94.4	81.3	77.2	80.7	81.4	172.8	128.8	111.6	95.7
Defense Department gross unpaid obligations outstanding: ²												
643. Total.....	105.0	103.6	101.1	102.1	98.6	98.0	95.3	92.4	95.3	101.5	103.5	104.0
644. Operations.....	111.6	106.8	100.6	104.5	96.8	93.1	95.2	85.5	90.8	102.6	107.6	104.7
645. Procurement.....	101.5	101.4	101.7	99.9	96.6	100.1	98.0	98.4	99.9	100.5	101.4	100.8
648. Manufacturers' new orders, defense products ³	94.9	96.3	96.8	81.6	75.1	131.1	107.3	95.8	104.9	118.5	93.1	102.3
653. Average weekly overtime hours, production workers, defense products industries ⁴	-.1	-.1	-.2	-.4	-.2	.0	-.2	.1	.2	.2	.2	.4
654. Accession rate, defense products industries ⁴	-.1	-.2	-.1	-.2	.1	.6	.2	.4	.3	.1	-.3	-.8
655. Layoff rate, defense products industries ⁴.....	.1	.1	.3	.0	.0	.0	.0	-.1	-.1	.0	-.1	-.2
657. Output of defense and space equipment ³	100.3	100.3	100.4	99.1	99.6	100.3	98.5	98.2	99.6	100.0	101.0	102.3
659. Manufacturers' inventories, defense products ³	98.5	99.5	100.2	100.1	100.4	100.8	101.4	101.2	100.7	100.6	99.8	97.9
661. Manufacturers' unfilled orders, defense products ³	101.2	101.0	100.5	98.8	96.9	99.1	100.0	100.0	100.0	101.4	100.8	100.6
Employment in defense products industries:												
670. Total.....	100.5	100.0	99.5	99.6	99.3	99.8	99.5	99.3	100.4	100.3	100.8	100.9
671. Production workers.....	101.1	100.0	99.3	99.4	99.2	99.8	98.9	98.6	100.6	100.4	101.3	101.4
673. Index of aggregate weekly hours, defense products industries.....	100.3	100.1	99.7	98.8	99.6	100.0	98.4	99.1	100.4	100.1	101.5	102.1
675. Index of aggregate weekly payrolls, production workers, defense products industries.....	101.0	100.6	99.6	96.7	99.2	99.5	96.4	97.4	100.7	101.1	102.8	104.9
Defense Department net outlays:												
680. Total, military functions and military assistance ¹	95.5	99.7	108.9	94.4	101.9	103.8	94.7	103.2	105.3	95.7	102.6	93.6
681. Operations ¹	99.0	97.9	103.9	98.9	97.3	99.5	97.3	100.1	104.1	101.3	103.6	95.5
682. Procurement ¹	97.6	98.9	106.9	96.6	95.9	111.2	93.5	101.6	90.1	99.2	102.7	108.9
683. Budget outlays for the national defense function ¹	95.7	101.5	107.6	93.6	100.3	103.8	92.7	107.3	104.9	94.9	102.3	95.0
685. Defense Department personnel compensation ¹	102.9	96.9	100.5	96.5	100.6	99.3	98.9	101.5	98.6	102.3	101.0	100.5
688. Manufacturers' shipments, defense products ³	89.2	99.8	101.8	99.8	101.9	104.5	94.8	96.4	104.6	103.4	98.5	106.0
QUARTERLY SERIES	IQ			IIQ			IIIQ			IVQ		
200. Gross national product ³	95.9			99.9			98.9			105.1		
264. Fed. Govt. purchases of goods and services, national defense ³	98.3			102.8			97.7			101.4		
546. Transfers under U.S. military agency sales contracts—exports ⁵	37			4			-69			29		
Defense Department military prime contract awards:												
626. Aircraft.....	96.6			100.5			80.8			122.4		
627. Missile and space systems.....	91.4			70.3			77.8			160.9		
629. Weapons and ammunition.....	84.9			96.2			178.3			47.8		
630. Electronic and communications equipment.....	93.5			88.0			125.7			93.7		
631. Combat vehicles.....	71.6			63.7			139.8			112.9		
632. Other hard goods.....	88.2			92.0			136.9			81.5		
633. Soft goods.....	107.5			69.0			107.5			149.3		
634. Construction.....	56.2			66.5			232.3			54.7		
635. Services.....	98.6			69.5			109.2			121.5		
636. Under \$10,000.....	98.9			96.9			124.0			80.9		
637. Educational and nonprofit institutions.....	96.9			65.5			79.1			159.4		
640. Outside U.S.....	100.0			54.7			108.4			140.0		
Aerospace industries:												
650. Manufacturers' new orders from the U.S. Government.....	86.6			85.1			122.9			105.5		
664. Manufacturers' unfilled orders from the U.S. Government.....	100.8			97.6			100.5			101.1		
689. Manufacturers' shipments to the U.S. Government.....	95.4			103.0			99.3			102.2		

NOTE: The seasonal adjustment factors presented in this table were computed using the techniques described in the Bureau of the Census Technical Paper No. 15, *The X-11 Variant of the Census Method II Seasonal Adjustment Program*.

Monthly data for Defense Department military prime contract awards by commodity category (series 626 to 640) have not been adjusted for seasonal variation. The series on direct defense expenditures—imports (series 547), Defense Department progress payments outstanding (series 666), and Defense Department personnel (series 677 and 678) contain no measurable seasonal variation.

¹ Factors are products of seasonal and trading-day factors.

² Prior to 1972, data for gross unpaid obligations outstanding are not available for a number

of months but these gaps were filled with averages of preceding and following months for purposes of estimating seasonal variation.

³ These series have been adjusted by the source agencies. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by dividing the seasonally unadjusted data by the seasonally adjusted data.

⁴ These series have been seasonally adjusted using the additive version of the seasonal adjustment program. Seasonally adjusted data are derived by subtracting the adjustment factor from the unadjusted data. Seasonally adjusted data for other series are derived by dividing the seasonal factors into the unadjusted data.

⁵ This series is the total of component series which have been adjusted separately by the source agency. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by subtracting the seasonally adjusted data from the seasonally unadjusted data.

SOURCES OF DEFENSE INDICATORS DATA

Source agency and DI series number	Published source	Contact
U.S. Department of Defense 617, 619, 621, 625-638, 640, 643-645, 666, 677, 678, 680-682, 685 (unadjusted)		Mr. Charles McCabe Department of Defense (202) 695-0586
U.S. Department of the Treasury 623 (unadjusted) 683 (unadjusted)	<u>Treasury Bulletin</u> , table F0-4 <u>Treasury Bulletin</u> , table FF0-5	
U.S. Department of Commerce Bureau of Economic Analysis 200, 264 546. 547. 696.	<u>Survey of Current Business</u> , national income and product accounts (table 1) <u>Survey of Current Business</u> , U.S. inter- national transactions tables-- Table 1, line 3 and table 2, line 3 Table 1, line 17	Mr. E. S. Kerber Bureau of Economic Analysis (202) 523-0616
U.S. Department of Commerce Bureau of the Census 648. 659. 661. 688. 650, 664, 689 (unadjusted) . . .	<u>Current Industrial Reports--</u> <u>Manufacturers' Shipments, Inventories,</u> <u>and Orders (M3-1)--</u> Table 2 Table 4 Table 3 Table 1 <u>Backlog of Orders for Aerospace</u> <u>Companies (MQ-37D)</u>	
U.S. Department of Labor Bureau of Labor Statistics *653 (unadjusted). *654, *655 (unadjusted). *670, *671 (unadjusted). *673, *675 (unadjusted).	<u>Employment and Earnings</u> Table C-2 for component data Table D-2 for component data Table B-2 for component data Table C-2 for component data	
Board of Governors of the Federal Reserve System 657.	<u>Federal Reserve--Industrial Production</u> (G.12.3) table 1	

NOTE: Series 613, 691, and 693 are not listed above but are derived as ratios of other series: 613 = 264 / 200; 691 = 661 / 688; 693 = 659 / 688. Seasonal factors are shown in appendix A (page 28). For series marked with an asterisk (*), the method of computation is outlined on page 30.

DERIVATION OF EMPLOYMENT, HOURS, AND EARNINGS SERIES

Series number	Basic data and components (with SIC codes)	Step 1	Step 2	Step 3
653	Average weekly overtime hours, production workers 19 Ordnance and accessories (19A) 366 Communication equipment (366A) 372 Aircraft and parts (372A)	Multiply average weekly overtime hours by production worker employment $19A \times 19E = A1$ $366A \times 366E = B1$ $372A \times 372E = C1$	Sum components $A1 + B1 + C1 = D1$	Divide sum by production worker employment $D1 / A5 = \text{unadjusted } 653$
654	Accessions 19 Ordnance and accessories (19B) 366 Communication equipment (366B) 372 Aircraft and parts (372B)	Multiply accessions by total employment $19B \times 190 = A2$ $366B \times 366D = B2$ $372B \times 372D = C2$	Sum components $A2 + B2 + C2 = D2$	Divide sum by total employment $D2 / A4 = \text{unadjusted } 654$
655	Layoffs 19 Ordnance and accessories (19C) 366 Communication equipment (366C) 372 Aircraft and parts (372C)	Multiply layoffs by total employment $19C \times 19D = A3$ $366C \times 366D = B3$ $372C \times 372D = C3$	Sum components $A3 + B3 + C3 = D3$	Divide sum by total employment $D3 / A4 = \text{unadjusted } 655$
670	Employment, total 19 Ordnance and accessories (19D) 366 Communication equipment (366D) 372 Aircraft and parts (372D)	Sum components $19D + 366D + 372D = A4$	Round sum to whole number $A4 = \text{unadjusted } 670$	
671	Employment, production workers 19 Ordnance and accessories (19E) 366 Communication equipment (366E) 372 Aircraft and parts (372E)	Sum components $19E + 366E + 372E = A5$	Round sum to whole number $A5 = \text{unadjusted } 671$	
673	Average weekly hours 19 Ordnance and accessories (19F) 366 Communication equipment (366F) 372 Aircraft and parts (372F)	Multiply average weekly hours by production worker employment $19F \times 19E = A6$ $366F \times 366E = B6$ $372F \times 372E = C6$	Multiply nonproduction worker employment by 40 hours $A4 - A5 = D6$ $D6 \times 40 = E6$	Sum components and convert to index $A6 + B6 + C6 + E6 = F6$ $F6 / 1967 \text{ avg.} = \text{unadj. } 673$
675	Average weekly earnings, production workers 19 Ordnance and accessories (19G) 366 Communication equipment (366G) 372 Aircraft and parts (372G)	Multiply average weekly earnings by production worker employment $19G \times 19E = A7$ $366G \times 366E = B7$ $372G \times 372E = C7$	Sum components $A7 + B7 + C7 = D7$	Convert to index $D7 / 1967 \text{ avg.} = \text{unadj. } 675$

NOTE: Data sources are shown on page 29. Seasonal factors are shown in appendix A (page 28).

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ALPHABETICAL INDEX—SERIES FINDING GUIDE

Series title	Series number	Current issue (page numbers)		Historical data (issue date)	Series descriptions (issue date)	Series title	Series number	Current issue (page numbers)		Historical data (issue date)	Series descriptions (issue date)
		Charts	Tables					Charts	Tables		
Accession rate, defense products industries	654	8	21	10/77	4/73	Hours, defense products industries	673	10	23	10/77	4/73
Aerospace industries						Inventories, manufacturers'					
Manufacturers' new orders from U.S. Government	650	See New orders.				Defense products	659	9	22	2/77	2/73
Manufacturers' shipments to U.S. Government	669	See Shipments.				Defense products industries	658	9	...	1/72	2/73
Manufacturers' unfilled orders from U.S. Government	664	See Unfilled orders.				Ratio to shipments, defense products	693	12	26	2/77	2/73
Balance of payments (defense-related)						Ratio to shipments, defense products industries	692	12	...	11/72	2/73
Cash receipts associated with military sales contracts	696	13	27	10/77	10/73	Layoff rate, defense products industries	655	8	21	10/77	4/73
Direct defense expenditures	547	13	27	10/77	10/73	Military personnel, Defense Department	677	10	24	9/76	8/68
Transfers under military agency sales contracts	546	13	27	10/77	10/73	Military prime contract awards—See Contract awards.					
Budget outlays for national defense function	683	See Outlays.									
Cash receipts associated with military sales contracts	696	See Balance of payments.									
Civilian personnel, Defense Department	678	10	24	9/76	8/68	Net outlays, Defense Department—See Outlays.					
Compensation						New orders, manufacturers'					
Payrolls, aggregate weekly, defense products industries	675	10	23	10/77	4/73	Defense products	648	7	20	2/77	2/73
Personnel compensation, Defense Department	685	11	25	7/76	8/68	Defense products industries	647	7	...	11/72	2/73
Contract awards, military prime						From Government, aerospace industries	650	8	20	10/77	2/73
Aircraft	626	...	16	10/76	8/68	Obligations incurred, gross					
Civilian Health and Medical Program	638	...	19	10/76	...	Defense Department, operations	619	...	15	11/77	8/68
Combat vehicles	631	...	17	10/76	8/68	Defense Department, procurement	621	6	15	11/77	8/68
Construction	634	...	18	10/76	8/68	Defense Department, total	617	6	15	11/77	8/68
Contracts under \$10,000	636	...	19	10/76	8/68	Outside Government for national defense	623	6	16	11/77	10/73
Educational and nonprofit institutions	637	...	19	10/76	8/68	Obligations outstanding, gross unpaid					
Electronics and communications equipment	630	...	17	10/76	8/68	Defense Department, operations	644	...	20	12/77	8/68
Missile and space systems	627	...	16	10/76	8/68	Defense Department, procurement	645	...	20	12/77	8/68
Other hard goods	632	...	18	10/76	8/68	Defense Department, total	643	7	20	12/77	8/68
Services	635	...	18	10/76	8/68	Operations, Defense Department					
Ships	628	...	17	10/76	8/68	Net outlays	681	See Outlays.			
Soft goods	633	...	18	10/76	8/68	Obligations incurred	619	See Obligations incurred.			
Total	625	7	16	10/76	8/68	Unpaid obligations outstanding	644	See Obligations outstanding.			
Weapons and ammunition	629	...	17	10/76	8/68	Orders—See New orders and Outstanding outlays.					
Work outside the United States	640	...	19	10/76	8/68	Budget outlays for national defense function	683	11	25	11/77	10/73
Defense and space equipment, output						Defense Department, operations	681	...	24	12/77	8/68
Defense Department						Defense Department, procurement	682	11	25	12/77	8/68
Gross obligations incurred—See Obligations incurred.						Defense Department, total	680	11	24	12/77	8/68
Gross unpaid obligations outstanding—See Obligations outstanding.						Output of defense and space equipment	657	9	22	10/77	10/73
Military prime contract awards—See Contract awards.						Overtime hours, defense products industries	653	8	21	10/77	4/73
Net outlays—See Outlays.											
Personnel compensation											
Personnel—See Civilian personnel and Military personnel.											
Progress payments outstanding											
Direct defense expenditures											
Employment											
Accession rate, defense products industries											
Employment, production workers, defense products industries											
Employment, total, defense products industries											
Hours, defense products industries											
Layoff rate, defense products industries											
Overtime hours, defense products industries											
Personnel—See Civilian personnel and Military personnel.											
Expenditures—See Outlays.											
Federal purchases of goods and services for national defense											
Gross national product											
Federal purchases of goods and services for national defense	264	5	14	10/77	10/73	Transfers under military agency sales contracts	546	See Balance of payments.			
Gross national product	200	5	14	10/77	10/73	Unfilled orders, manufacturers'					
National defense purchases as percent of GNP	613	5	14	10/77	10/73	Defense products	661	9	22	2/77	2/73
Gross obligations incurred—See Obligations incurred.						Defense products industries	660	9	...	7/71	2/73
Gross unpaid obligations outstanding—See Obligations outstanding.						From Government, aerospace industries	664	9	22	10/77	2/73
						Ratio to shipments, defense products	691	12	26	2/77	2/73
						Ratio to shipments, defense products industries	690	12	...	11/72	2/73
						Unpaid obligations outstanding—See Obligations outstanding					

